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ABSTRACT

The document provides guidelines for conducting a workshop for administrators, teachers, and counselors on career education for the hearing impaired student in grades K through 12. Initial chapters address the history and purpose of the workshop; concept outline; instructions for using the manual; selection, registration, and preworkshop orientation of participants; workshop facilities preparation; and preparation of the trainer. The bulk of the document contains 18 modules, each with strategies designed to be implemented in 45 minutes (except for two 90 minute modules). Each module begins with statements of the trainer goal, learner outcomes, and advance preparation procedures; followed by an outline of materials/resources needed with concepts covered; module procedures (including time, a code for visuals to be used, and trainer narrative); and a concept outline. Modules cover such topics as self awareness as the basis for career development, decision making techniques, and technical assistance resources. A supplementary section provides additional instructions for each module; and appendixes contain orientation materials, transparency masters, and a summary outline of the delivery skills workshop. (SBH)

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TRAINER'S MANUAL

Career Education/Planning Skills

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NPCE
National Project on Career Education
A Joint Project of the
Model Secondary School for the Deaf at
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National Technical Institute for the Deaf at
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We are also indebted to the NPCE co-directors. Without their vision and faith in our mission, and without their support for our efforts, this project would have faltered.

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Victor Galloway, former Director of Education - MSSD

TABLE OF CONTENTS

Page #

Section A. Introduction to the NPCE Trainer's Manual

Chapter 1. History and Purpose of the NPCE A-1

Chapter 2. Concept Outline for the Workshop "Career Education and Planning Skills" A-3

Chapter 3. How to Use the NPCE Trainer's Manual A-6

Section B. Preparing for the Workshop

Chapter 1. Selection of Participants B-1

Chapter 2. Pre-Workshop Orientation for Participants B-4

Chapter 3. Registration Logistics B-7

Chapter 4. Setting Up Workshop Facilities

- A. Site Coordinator B-9
- B. Training and Food Arrangements B-11
- C. Media Arrangements B-19
- D. Lodging Arrangements B-29

Chapter 5. Preparation for Teaching B-31

Section C. Workshop Modules

Module 1 Introduction C-1

2 Self Awareness C-9

3 Barriers C-15

4 Talking Same Language C-37

5 CCEM Model C-46

6 Infusion C-67

7 Community Involvement C-84

8 Overview of Planning/ Implementation C-92

9 Needs C-102

10 Power/Support C-107

11 Goal Setting/Eval. C-114

12A Decision Making C-121

			Page #
Module	13A	Using NGT	C-134
	14A	Community Advisory Committee	C-141
	15A	Implementation	C-150
	12B	Self Awareness & Career Awareness	
	13B	Educ. Awareness/ Economic Awareness	C-163
	14B	Beginning Competency	C-168
	15B	Resources	C-181
	16	Sharing What We've Learned	C-210
	17	Planning Your Plan	C-217
	18	Is There Life After a Workshop?	C-223
Section D.		Trainer's Manual Supplement	D-1
Appendixes	A.	Workshop Brochure, Pre-Workshop Readings and Sample Cover Letter	
	B.	Transparency Copies	
	C.	Summary Outline of Delivery Skills	
	D.	Tests	

Roadmap of Content and Modules

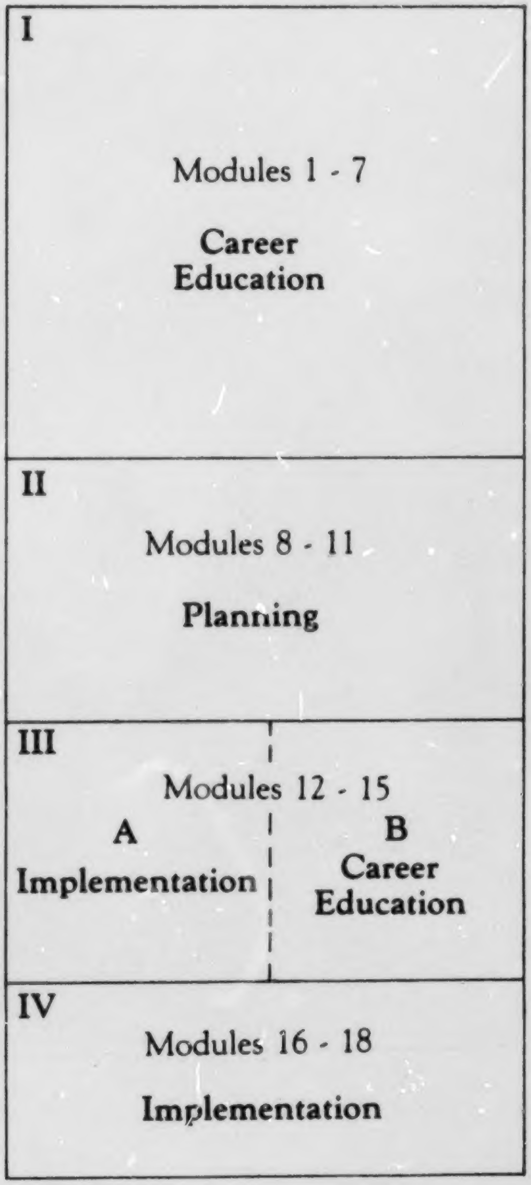
I. These modules provide administrators, teachers and counselors with basic career education background. New concepts include stereotyping, infusion of the CCEM model and collaboration with community programs.

II. These modules provide administrators, teachers and counselors with basic planning background. Appreciation for a systematic approach and a common language for the planning process should result.

IIIA. Administrators will be exposed to the NPCE implementation process and learn how to lead a group to consensus.

IIIB. Teachers/Counselors will receive indepth practice in curriculum infusion of the elements of the CCEM.

IV. All team members will prepare an implementation plan for their most urgent goals.


I
Modules 1 - 7
Career Education
II
Modules 8 - 11
Planning
III
Modules 12 - 15
A
Implementation
B
Career Education
IV
Modules 16 - 18
Implementation

Chapter One: History and Purpose of the Workshop

At two national working conferences on career development for the hearing impaired, jointly sponsored by the Model Secondary School for the Deaf and the National Technical Institute for the Deaf in 1978, participants identified the future priorities for career education of hearing impaired students in grades K-12. A description of the results of the working conferences appears in the volume, Career Development for the Hearing Impaired: Proceedings of Two Working Conferences (Updegraff, et al, 1979). The top rated issues in terms of urgency and importance were:

1. inservice training of faculty and staff in schools and programs for the deaf, and
2. a comprehensive plan for implementing career education goals in such programs.

The National Project on Career Education (NPCE) was jointly funded by the two institutions to develop a system to deliver career education and planning skills by means of inservice training to educators who work with primary, elementary, and secondary aged hearing impaired students. The long range goal is to ensure that in each state there is at least one team of experienced and skilled facilitators who can assist other educational programs serving hearing impaired students to:

1. infuse career education concepts into all content curriculum, and
2. develop and implement plans for a comprehensive K-12 career education program.

The workshop, "Career Education and Planning Skills," was developed to meet the following goals:

1. increase participants' awareness of career education and how it is implemented;
2. increase participants' skill in planning, using career education as a vehicle;
3. Help participants develop a plan for their home school; and
4. Expose participants to some career education activities which they may wish to use in their home schools.

Chapter Two: Concept Outline

There are many terms and concepts used in the context of this workshop which have evolved into specialized meanings. The outline below serves as a comprehensive display of the content and a review of the vocabulary.

I. Career Development - a natural process of maturation. (CD)
  A. Stereotyping - ascribing to all members of a particular minority the traits which may seem predominant or typical of the minority.
  B. External Barriers - attitudes of others or physical limitations to career development.
  C. Internal Barriers - negative self concept and low aspirations which prevent optimum career development.
  D. Values Clarification - a process resulting in growth in self knowledge.

II. Career Education - a planned program of experiences to enhance one's career development. (CE)
  A. Work - conscious effort aimed at producing benefit for oneself and/or others.
    1. Data - numbers, information
    2. People - friends, family members, other workers
    3. Things - physical objects in the environment
  B. CCEM Model - Comprehensive Career Education Matrix
    1. Self Awareness - knowing one's interests and abilities.
    2. Educational Awareness - knowing the training required for a specific job.

3. Career Awareness - knowing the job title for a specific line of work.
4. Economic Awareness - knowing the monetary system and how work is related to money.
5. Decision-Making - choosing among alternatives.
6. Beginning Competency - basic skills needed to work with data, people or things.
7. Employability Skills - entry level ability within a specific field of work.
8. Attitudes and Appreciations - feelings and impressions toward work and one's personal involvement in the world of work.

C. Infusion - the combination of both career education and content objectives in one classroom activity.

D. Integration - the combination of both career education and vocational skill objectives in one out-of-school activity.

E. Cooperation - support of the school's CE program by community groups.

F. Resources - materials and people which enrich the CE program offering.

1. Print
2. People
3. Media

III. Planning - documentation of decisions and steps needed to reach a goal.

A. Systematic Planning - step by step process of documenting decisions needed to reach a goal.

B. Collaboration - involving community representatives and school personnel in planning a CE program.

C. **Needs Assessment** - measuring how well the CE program aspects compare with the ideal

D. **Power** - refers to people who can influence the success of the CE program.

E. **Support System** - refers to people who can have positive influence on helping CE program to succeed.

F. **Goal Setting** - establishing an outcome which will improve the CE program.

G. **Evaluation** - measuring how well the program goals were met.

H. **Communication** - refers to the two way, open dialog among school and community planners.

IV. **Implementation** - putting plans into action.

A. **Group Decision-Making** - reaching consensus

1. IGT - Interactive Group Technique
2. NGT - Nominal Group Technique
3. Delphi-Technique - accomplished by mailing out questionnaire.

B. **Task Analysis** - break down of specific jobs to be done in order to accomplish a goal. Usually used with time lines.

C. **Incentives** - used as rewards and motivation for participation.

D. **Team Development** - growth of feelings of closeness, confidence and a sense of helping among members of the cadre of CE facilitators.

E. **Technical Assistance** - the period of time (6 months to 2 years) after the workshop when participants may need outside resources from the trainers to continue the implementation of their comprehensive plans.

Chapter Three: How to Use Your Trainer's Manual

Modular Format

The modular format for this workshop allows for the greatest flexibility of scheduling and combination of individual components. Each module consists of strategies designed to be implemented in 45 minutes, except for Modules 1 and 17 which are double modules of 90 minutes each.

For intensive training the suggested schedule for three days' presentation appears below:

	Day One	Day Two	Day Three
8:30 a.m.	Module 1	Module 8	Module 14 A, B
9:15		Module 9	Module 15 A, B
10:00	Break	Break	Break
10:30	Module 2	Module 10	Feedback A, B, C
11:15	Module 3	Module 11	Module 16
Noon	Lunch	Lunch	Lunch
1:30 p.m.	Module 4	Guest Speaker or Sharing Time	Module 17
2:15	Module 5	Module 12 A, B	
3:00	Break	Break	Break
3:30	Module 6	Module 13 A, B	Module 18
4:15	Module 7	Adjourn	Adjourn
5:00	Adjourn		

These full day training sessions do not necessarily need to be scheduled on successive days. The inservice schedule may provide for three days spread over a full year, one day per quarter. If the days are not scheduled consecutively, a short 15-minute review of the previous content should be included in the announcement of the next career education inservice day.

The continuity of the first seven modules derives from their career education content. Modules 8 - 11 also represent a distinct content chunk related to systematic planning. Modules 12A and 13A both were designed for administrators and cover group decision making, while Modules 12B, 13B and 14B cover infusion of the CCEM and were designed for counselors and teachers. Modules on Day Three, except 14B, are able to stand alone and could be viewed as practice rather than training in new content.

For schools which have established a weekly inservice schedule, the modules may be offered one-at-a-time for 45 minutes each week. Special arrangements may need to be made for Modules 1 and 17 which were designed for 90 minutes.

Layout For Modules

In this Trainer's Manual, each module begins with an overview describing the teacher's goal(s) and participant outcome(s), media and other materials needed, and a concept list. More in-depth information and background may be found in the Trainer's Manual Supplement which is found in Section D.

The trainer's narration specifies the content and timing of the module strategies. Trainers will find media needs listed to correspond to the narrative in an adjoining column.

Coding System for Media

There are three categories of software needed to mediate the workshop. All handouts are designated "HO" with the module number and order of use found in the upper right corner. That is, the second handout referred to in Module 3 would have, in the upper right corner, "HO-3-2".

Transparences are designated "T" with a similar code. Other media, like filmstrip-tape presentations or films are designated "M" with the module and sequence coded as numerals.

Pagination

Each section and module in this Manual has been paginated independently. All sections are lettered in alphabetical order; however, the modules are paginated by module number. Thus "16 - 4" at the bottom of the page refers to page 4 in Module 16.

Supplement

For those modules requiring in-depth content review or specific notes to the trainer with rationale for implementation, a module supplement was written. Not all modules required supplementing. The supplementary materials appear in Section D after the modules.

Tests

The test which was designed to assess the mastery of career education and planning objectives appears in Appendix D in the back of this Manual. An answer key is provided.

Chapter One: Selection of Participants

This workshop has been designed with a team concept for participation. It is important to communicate this concept when recruiting participants from several schools or from one school or program.

Several Schools

If more than one school or program will be sending a representative team to participate in the workshop, the team composition should consist of an administrator, two teachers (one elementary, one high school) and a counselor. Fewer than four members will weaken the influence the team has in their change agent efforts for implementing career education. The team should choose or have an appointed team leader.

One School or Program

If the workshop will be offered to a large group of participants all from one school, the team concept may be applied by dividing participants by level (elementary, middle and high school) or by function (teachers, dorm counselors, administrator, other). As with several schools, each team must designate a leader. The content of modules 1-11 will flow more smoothly using grade level as the basis for practice on the planning steps.

For implementation, it will be necessary for the teams to communicate their priority goals and decide which goals should be pursued for school wide implementation. Module 17 may be used to reach these decisions. Directions for planning for implementation of school-wide goals are found in the supplement to Module 17, Section D.

Administration Involvement

Contact with the training team may or may not be initiated by the school administrator. The trainers should communicate directly with the school superintendent or program administrator to describe the team concept and the optimum criteria for participation. The workshop was designed for about 30 participants. If they are representatives of several schools, they should be lead people with interest in career education and experience in working with deaf students. They do not need any prerequisite knowledge of career education and/or planning skills. If the entire faculty and staff of one school will be participating, it will be best to plan an awareness level presentation as a pre-workshop offering with only about 30 people actually participating in the whole program of 22 modules. Again these participants do not need any background in career education or planning to complete the workshop successfully.

The chief school administrator is also asked to attend the final implementation modules. In Module 16, the team members will report to each other and to their administrators their learnings from the parallel modules. They will work together on the development of implementation steps for 3 goals in Module 17 and analyze their resource needs in Module 18. The presence of the chief school administrator facilitates communication and commitment.

Program Descriptions

For teams which have experience in career education or which have plans to develop a CE program, the team leader should prepare a brief (5-10 minutes) description of their program or plans to be shared in Module 1. The cover letter to participants must communicate this time for sharing so that team leaders will be prepared to present their information. A sample cover letter may be found in Appendix A of the Trainer's Manual.

Chapter Two: Pre-Workshop Orientation For Participants

Prior to attendance at the workshop, "Career Education and Planning Skills," participants will need several orientation materials. Be sure to select participants early enough so that all data such as correct name, position, address for mailing purposes are available.

Biographical Data Form

Demographic data are to be documented and returned to provide the trainers and site coordinator information regarding the audience composition for special services or content considerations.

Pretest

Use of the pretest is optional. Participant achievement in terms of gain scores on workshop content has been significant, based on data collected at the four regional workshops held in Fall, 1979. The pretest/posttest is found in Appendix D.

Stamped Return Envelope

Enclosing a return envelope addressed to the site coordinator or trainer will assure a better response to the biographical data forms and the pretests prior to the workshop. These data may be collected at registration time or during Module 1, if they aren't returned prior to the workshop.

Pre-Workshop Readings

Copies of each of the three pre-workshop readings (see Appendix A) should be enclosed with self-evaluation questions to check participant learnings. These are to be retained by participants and brought to the workshop.

Description of the Workshop

Include a copy of the brochure describing the workshop on "Career Education and Planning Skills." The brochure covers the purpose of the training, expected participant objectives, general methods to be used, and history of the NPCE. If the workshop format for content will be changed in any way from the description in the brochure, the changes should be outlined in the cover letter.

Cover Letter

In the cover letter are included an exact schedule of days, times, attendance requirements, suggestions regarding the scheduling of transportation arrivals and departures.

A reminder regarding the tasks participants need to accomplish before coming to the training is included, and an invitation to bring materials and ideas for sharing. Also included are directions for each team leader to prepare a five-minute presentation describing their career education program in their own school.

Food arrangements should be specified as well as recreation ideas, suggested attire, optional side trips and local sites.

Transportation arrangements to and from the airport and training site are to be covered, with parking facilities, lodging facilities (if necessary), and any specially arranged services for handicapped participants (i.e., interpreters, accessible architecture).

The workshop site coordinator's address and telephone number should also be included, along with a checklist of the orientation package contents.

A sample cover letter is available in Appendix A.

Maps, Directions

If participants will be driving to the workshop, a map of the area with directions describing the route from main highways, for parking, for entering the building may be needed. For out-of-town participants, a map may be helpful in establishing the location of the lodging and training sites.

Motel Return-Mail Card

If participants will be lodged in a motel, a card specifying single vs. double room and roommate choice may be used. Most motels provide these cards when a block of rooms will be used. The cards should be stamped, "Career Education" to identify the group.

Chapter Three: Registration Logistics

Participant registration for the workshop should be handled several weeks prior to the workshop in conjunction with the supertintendent of the participant school.

On-site registration should be set up prior to Module 1, as a checking-in process. Since this may be the first contact between participants, hosts, and trainers, it is important to maintain an organized and helpful stance.

The registration area should be labeled clearly. Signs and arrows directing participants to the location from parking lots, main entrances, or lodging sites should be set up on registration day. The area should be separate from all other activities. Someone who is knowledgeable about the host institution should be available at the registration table. The area should be set up with a convenient traffic flow in mind.

Materials needed include:

1. check list to verify participants' arrival.
2. name tags filled in with names and school (large first name), arranged alphabetically.
3. participant notebooks, with copies of handouts and transparencies.
4. sign-up for local tours or other services (optional).
5. exhibits of career education materials and/or curricula (optional).
6. refreshments (optional).
7. extra maps.
8. extra pens, markers.
9. blank name tags.

Workshop personnel who are designated to serve during registration time should wear an identification tag. One person should serve as greeter while another (or others) accomplish the actual registration function. Relief should be provided after every hour. A minimum of two people is always needed regardless of group size.

A lounge setting with convenient restrooms and coat racks makes for a comfortable atmosphere while participants are waiting to move to the first session.

The directions for the trainers or assistants who will register the participants are as follows:

1. Ask participant's name.
2. Check off on list of names.
3. Give out name tag, or let participant pick it out of the alphabetical arrangement.
4. Give out participant notebook.
5. Give out registration packet with local information provided by the host institution.
6. Provide any other information, directions.

Chapter Four: Setting Up Workshop Facilities

A. Site Coordinator

A site coordinator will be needed to handle the workshop arrangements when workshops are held in other locations. The ideal choice would be someone who has had experience in setting up similar workshops or programs in his or her host school. If no one possesses this experience, the person selected should be resourceful and decisive with enough administrative backing to overcome the obstacles that occur during any undertaking of this size. It is important to stress that the coordinator's obligations will require considerable time prior to the workshop, and during the workshop duties may be so demanding as to prevent full participation.

The responsibilities of the coordinator include the following:

Before Workshop

Reserve rooms for training program.

Make media arrangements for the schedules/modules.

Set up lodging and food arrangements, if necessary.

Make hospitality arrangements for trainers and observers.

Arrange transportation for trainers and observers, if necessary.

Organize local information, maps, tours, etc. (optional)

Manage workshop budget.

Registration Time

Arrows or directions to registration site.

Greet trainers; be available for questions.

Check for problems.

During the Workshop

Check for problems.

Serve as "gofer" when participants and trainers need copies made, supplies, or make telephone calls.

The site coordinator will play a key role in the comfort of participants and the success of the training in a workshop setting. It is crucial to keep the site coordinator informed of any changes as arrangements and plans evolve.

Chapter Four: Setting Up Workshop Facilities

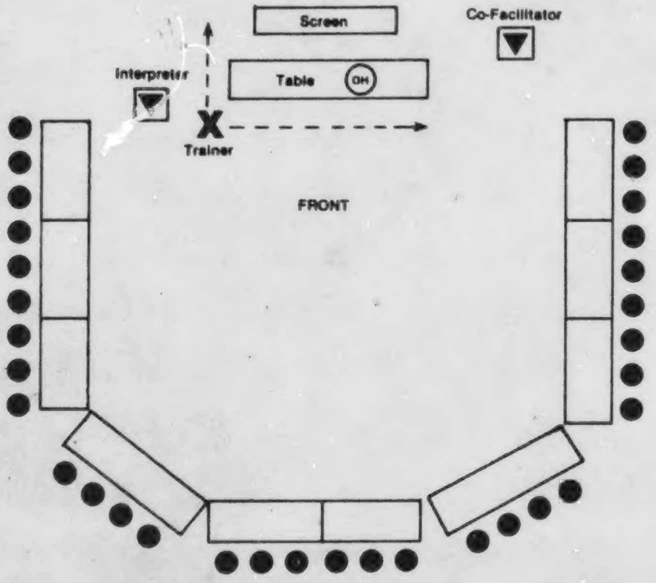
B. Training and Food Arrangements

Large Group Interaction

The workshop modules which are presented to the entire group of participants (Modules 1-7, 18) should be held in a training setting conducive to seat work, and yet allow complete group visibility for interactive communication.

The room ideally should be large enough to set up nine long tables in a "U" formation as illustrated below for about 30 participants. Participants may sit on the outside of the "U" where they can simultaneously view the trainer, the interpreter, and screen positioned at the open end. The trainer needs a long table for the overhead projector, transparencies, handouts and for the Trainer's Manual or other references. A smaller "U" can be made to accommodate fewer people.

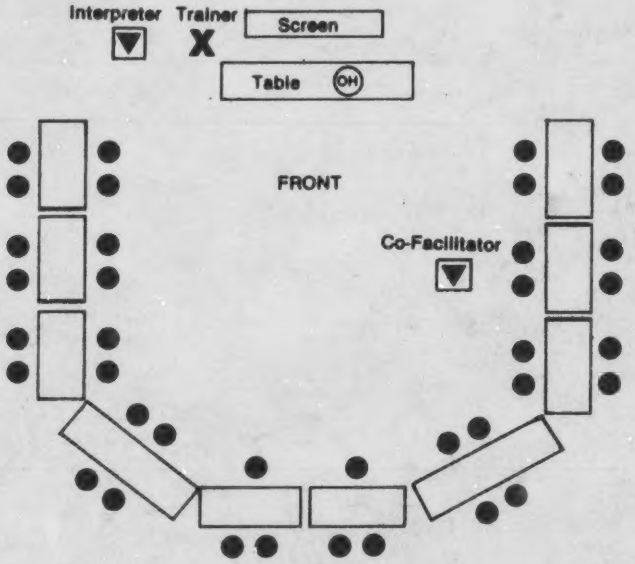
Figure 1: Training Room Set-Up: Interactive



Teamwork

Modules 5, 7-11, 16, and 17 are designed for all participants to be seated with their school teams. The seating may be modified as illustrated below. It is still necessary for participants to view the trainer and transparencies at the front of the room.

Figure 2. Training Room Set-Up: Teamwork

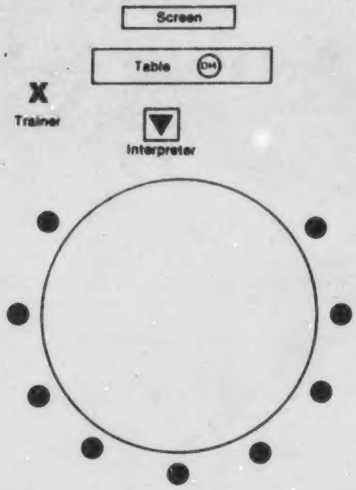


The trainer presents the objectives and the processing questions from the front of the room. Both the trainer and cofacilitator(s) then mingle with the teams to assist them in completing the planning exercise sheets. It may be helpful for communication within the teams to move the tables apart, if there is room. If there are team members who require interpreting assistance to communicate with their deaf teammates, the interpreter and cofacilitator may serve in this role.

Parallel Modules

The administrators' modules, 12A - 15A, should be held in a separate room from the parallel modules designed for teachers and counselors (12B - 15B). An overhead projector and screen will be neeeded in both rooms. The "A" modules require a smaller, less formal setting. It may be possible to seat all the administrators around one table, either round or rectangular in shape, leaving the front end open.

Figure 3. Training Room Set-Up: Administrators



The "B" modules may be held in the same room as the large group sessions with the interactive set-up. The trainer should "close up" the U table set-up by removing any unneeded tables. This arrangement will promote a more intimate interaction during these modules.

Position of the Trainer

The trainer may move to a more central position during the discussion or step back to allow the group to view supporting media, or when the cofacilitator has the floor. The screen and overhead projections should be raised sufficiently above the trainer to be seen while the trainer is standing.

The cofacilitator may choose to sit up front, with the participants, or sit at the rear of the room. This arrangement should be worked out before the session to meet the comfort of the trainer. The front position allows the cofacilitator to assist with passing out handouts, monitoring media and other helpful tasks.

Use of the Interpreter

During large group sessions the interpreter should always sit up front. Ideally trainers will sign their presentations, lecturettes, discussion questions and directions. During the trainer's signing the interpreter may simply sit by until needed. For trainers who feel uncomfortable signing for themselves the interpreter(s) may sit or stand beside the trainer while interpreting.

The most important use of the interpreter is during the group interaction with processing questions, discussion and feedback. The recommendation based on the NPCE regional workshops with participants using a variety of communication modes, is for the interpreter to sign all participants' comments, even if the participants sign for themselves. In this way, deaf participants will be able to watch the speaker or they may opt to attend to the interpreter. This policy should be announced at the beginning of the workshop to establish a comfort level for participants and for the interpreter.

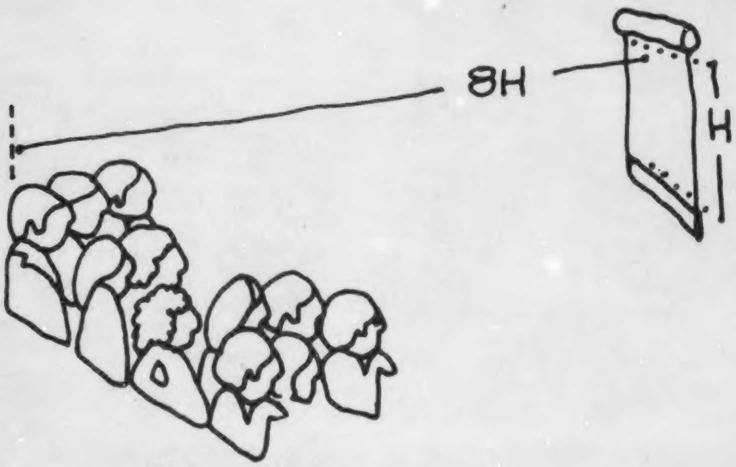
Based on the NPCE experience using interpreters in the regional workshops, one interpreter is adequate for the large group and teamwork modules, if the trainers can sign for themselves. If the trainers need interpreter support for their narration, an additional interpreter will be needed. An additional interpreter is also needed for covering the parallel modules. It is also important that the interpreter(s) possess reverse interpreting skills to facilitate the full participation of all deaf participants.

If all the trainers are competent and comfortable signing their narration, the interpreters should be briefed before the workshop regarding how they will be asked to serve. When inadequately prepared, interpreters have expressed discomfort, feelings of uselessness, and even taken offense at being asked to "stand-by" while the trainers signed for themselves. Advance preparation will give them confidence in this modified interpreter role.

Position of Media

The media should be positioned at the front of the room and visible from all participant chairs. All participant chairs should be located no further a distance from the screen than 8 times the height of the screen.

Figure 4. Media Set Up



The overhead projector is used in every module. The transparencies should be projected on a screen elevated above the head of the standing trainer. The projector may be positioned on the trainer's table or on a separate cart. There should be a surface available for the transparencies to be deposited after use.

In setting up the transparencies, they may be stacked in the order in which they will be used. In addition the handouts or exercise sheets may be inserted in the pile of transparencies in the appropriate positions.

The workshop readings, objectives for each module, and notes should be collated by module and inserted in a participants' workshop ring notebook. The notebook may be distributed when participants register for the workshop or at the beginning of Module 1. Participants should be instructed to bring their notebook with them to each module.

All packaged media (e.g. filmstrip/tape presentation and 16 mm film) used in the workshop are captioned for use with a mixed deaf and hearing audience. Deaf participants may wish to sit near the front of the room for best visibility.

Food Service Facilities

For workshops involving about thirty participants, special arrangements will be needed to expedite the food service for lunch, coffee breaks, and hospitality. It is recommended that participants be on their own for breakfast unless they are lodged in a residential setting where a common meal would be more convenient. Even in a dormitory situation, it is recommended that participants be responsible for their own dinners.

Lunches, because they fall between sessions, may be provided for a "captive audience." A schedule allowing 1 1/2 hours for lunch should be adequate in a school lunchroom or with catered service. Trainers should strive to attend all meal functions and co-mingle with participants as much as possible.

A morning coffee break and/or coffee service available 15 minutes before the first session in the morning is mandatory to maintain positive affect. Other beverages should be available for non-coffee drinkers. Beverages for the afternoon break are desirable but optional. Access to a soda machine may be sufficient.

A brief hospitality session after the afternoon sessions is also desirable to facilitate sharing of transportation and/or dinner plans. Evenings should be left open for participants to pursue fellowship among the group or to be on their own.

The site coordinator should assume responsibility for setting up all food services. Any expenses for which participants will be obligated should be detailed in the cover letter.

Other Considerations

The site coordinator should also check the following facility considerations:

1. Rooms where media will be used should be able to be darkened, preferably partially darkened to allow participants to take notes if desired.
2. Ability to control temperature during the training program should be checked.

3. Establish the time, when the building can to be opened and must closed. If extra keys are needed, they should be acquired before the workshop.
4. Location of electrical outlets must be convenient for media use. If extension cords are used, they should be taped to the floor to prevent tripping.
5. A storage room or area in the main training room should be set aside for the workshop materials and supplies. It should be easily accessible by the trainers during the modules.
6. Clerical assistance to serve as "gofer", make copies, type workshop "emergency" needs.
7. Ideally, the trainers or someone on the training staff should visit the host institution and tour the workshop site prior to the workshop to check these arrangements.

Chapter Four: Setting Up Workshop Facilities

C. Media Arrangements

This multimedia, experiential workshop for a mixed deaf and hearing audience will depend, in large part, for its success on the adequacy of media support. Preparation of mediated materials requires production of copies of handouts and transparencies as well as arrangement for use of the hardware delivery system.

Preparation of Handouts

An important part of each NPCE local workshop is the dissemination of printed materials to participants. These materials parallel materials received by training teams in the regional workshops. Master copies of all of these materials are part of the NPCE training package. The duplicated handout copies are the only expendables of the workshop. Master copies were included because of the impossibility of NPCE headquarters anticipating and providing for all handout needs at the local workshops. It is the responsibility of the training team to be sure an adequate number of copies have been duplicated for all participants, trainers and observers. Should the master copies become lost or damaged, replacements will be available from NPCE for a nominal cost.

All transparencies are boxed separately from handout masters. Handout copies of some transparencies are given to participants as a form of "note-taking service." Thus, the master copy of such a transparency would be listed with other handout masters.

At first, the organization of workshop handouts may seem a bit confusing, because of their variety, quantity, and their different uses. These include:

workshop readings, copies of most transparencies used in the workshop, worksheets that participants use and keep, and evaluation forms participants give back to the training team. Basically, however, the master copies of handouts have been organized into three sections based on where and when they are used.

Pre-Workshop Readings - These "readings" include three articles to be read by participants before the workshop. The pre-workshop mailing also includes a registration form and pretest (optional) that need to be completed and returned before the workshop. These materials and a brochure describing the workshop are part of the pre-workshop package sent to all participants (see Appendix A).

Participant Notebooks - These handouts are designed to be placed in a notebook for each participant before the workshop begins. Trainers must take responsibility for duplicating, collating, and inserting these materials into the appropriate position in the notebooks so that participants can easily locate each handout when referred to during the training.

Workshop Handouts - An attempt has been made to include as much of the handout materials as possible in the participant notebook to save the time that would be taken handing these out during the modules. Handing out materials during the workshop takes valuable time and makes the trainers' job that much harder. However, there are some handouts which are not appropriately handed out before the modules are presented. This last group of materials needs to be duplicated and handed out in the module when indicated in the Trainer Narrative.

Preparation and Use

Copies of handouts should be of the best possible quality. The handout masters have been ordered according to the index below. It is a good idea to double check all masters in case some have been borrowed and not returned. It is also a good idea to keep all handout masters in one place and loan out only duplicates of handouts. This will help insure a complete set and avoid damage.

The master handout set has been organized into three sections; Pre-Workshop Readings, Participant Notebook, and Workshop Handouts. The Pre-Workshop Readings section can simply be duplicated and inserted into the Pre-Workshop Mailer. The Participant Notebook handouts should be duplicated, collated, holes punched, and then put in the 3-ring participant notebook that trainers may supply for each participant. These handouts should be collated copies of the master set and if desired, can be printed on the front and back to save paper. The Workshop Handouts should be duplicated in order, but not collated unless they have more than one page. These will be given out by the trainers during each module.

On a final note; this Trainer's Manual contains copies of all transparencies in Appendix B and worksheets at the end of the script for each module for easy reference when preparing the workshop. It does not contain the larger handouts designed for the participant notebook. In preparing for the teaching of a module, it is advisable to have a copy of the participant notebook as a reference to all handouts.

Index of Handouts

This index has been prepared to assist in planning for production of the handouts.

Pre-Workshop Readings. The list below specifies the material to be sent to participants about three weeks before the workshop.

HO #	Title	Number of Pages
HO-P-1	Biographical Data Form	1
HO-P-2	Pretest (optional)	3
HO-P-3	"Meet Nansie Sharpless"	5
HO-P-4	"An Introduction to Career Education"	8
HO-P-5	"Overview of a Career Development Model"	7
HO-P-6	Description of the Workshop	1

Participant Notebook. The list below indicates the transparency copies and handouts which should be assembled into the participants' notebooks prior to the workshop. A one inch, 3-ring binder should be supplied for each participant containing each handout in the order shown below. Tabs may be supplied and inserted in front of Modules 1, 8, 12A and 16. Be sure to line up the punch holes for easy insertion.

The preparation of the notebook ahead of time may seem burdensome in light of the time needed for other preparation tasks. However, the savings in instruction time is enormous if these handouts are already available. There is the added benefit of having notes in the notebook so participants won't need to copy the content from the transparencies.

HO #	Title	Number of Pages
T-1-3	Goals	1
T-1-4	Roadmap	1
T-1-5	Objectives	1
HO-1-1	Concept Outline	1
T-2-1	Objectives	1
T-3-1	Objectives	1
HO-3-1	Confessions of a 7th Grader	1
HO-3-2	Perceptions of Educators	14
T-4-1	Objectives	1
T-5-1	Objectives	1
T-5-2	CCEM Model	1
T-5-3	Stages of Career Development	1
HO-5-1	Curriculum Samples	15
T-6-1	Objectives	1
T-6-2	Infusion vs. Add-On	1
T-6-5	Comprehensive CE Curriculum	1
HO-6-2	Research Findings on Infusion	3
T-7-1	Objectives	1
T-7-2	Infusion vs. Integration	1
T-7-3	Cooperation vs. Collaboration	1
HO-7-2	Planning a Field Trip	3
T-8-2	Roadmap	1
T-8-3	Objectives	1
T-8-4	Systematic Planning and Implementation	1

HO #	Title	Number of Pages
T-8-5	Planning: Needs Assessment	1
T-9-1	Objectives	1
T-10-1	Objectives	1
T-10-3	Sources of Power	1
T-10-4	Kinds of Support Systems	1
T-11-1	Objectives	1
T-11-3	Goal Setting/Evaluation Lecturette	1
T-12A-1	Roadmap	1
T-12A-2	Objectives	1
T-12A-6	Decision Making Techniques	1
HO-12A-1	NGT vs. IGT	3
HO-12A-2	The Delphi Technique	3
T-13A-1	Objectives	1
T-14A-3	Objectives	1
T-14A-4	Cooperation vs. Collaboration	1
T-14A-5	Task Force vs. Community Advisory Committee	1
HO-14A-1	Sample Materials	8
T-15A-1	Objectives	1
T-15A-2	Steps in Systematic Implementation	1
T-12B-1	Roadmap	1
T-12B-2	Objectives	1
T-13B-1	Objectives	1
T-14B-2	Objectives	1

HO #	Title	Number of Pages
HO-14B-1	Script for Work Functions in Everyday Life	6
HO-14B-2	Work Function Definitions	3
T-15B-1	Objectives	1
HO-15B-2	Guidelines for Using a Deaf Role Model	5
HO-15B-3	Print/Media Resources	12
T-16-1	Roadmap	1
T-16-2	Objectives	1
T-17-1	Objectives	1
T-18-1	Objectives	1

Workshop Handouts (class). The list below specifies the transparency copies and worksheets used during the modules. The duplicated copies may be stacked in their respective order of use with the transparencies for each module.

HO #	Title	Number of Pages
T-3-2	Film Exercise Sheet	1
HO-4-1	Definitions	1
HO-4-2	Concept Outline - Definitions	3
T-5-4	List of CE Tasks	1
HO-6-1	Infusion Practice Sheet	5
HO-7-1	Field Trip Worksheet	2
HO-8-1	Career Education Needs Assessment	4
HO-9-1	Needs Focusing Worksheet	2
HO-10-1	Power Focusing Worksheet	1
HO-10-2	Support System Worksheet	1
HO-11-1	Goal Setting Worksheet	1
HO-11-2	Example Goal	1

HO #	Title	Number of Pages
HO-13A-1	Characteristics of a Healthy Organization	1
HO-15A-1	NPCE Implementation Form	2
HO-12B-1	Personal Inventory: Why Do You Work?	1
HO-13B-1	Educational Awareness Worksheet	1
HO-13B-2	Lemonade Game	1
HO-13B-3	Example Game	1
T-13B-2	Unusual Occupational Titles	1
HO-14B-3	Example Lessons for Beginning Competency	1
HO-15B-1	Job Title Information Tree	1
T-15B-2	Criteria for Selection of Resources	1
HO-16-1	Team Development Scale	3
HO-17-1	NPCE Format for Planning Your Implementation	4
HO-17-2	Example Plan	1
HO-18-1	Workshop Questionnaire	1
HO-18-2	Career Education/Planning Skills Test	3

Arrangement for Media Equipment

Although media requirements for the NPCE workshop are not great, the delays that can be caused by hardware that is not delivered can be very frustrating and virtually ruin a multimedia workshop. It is important to reserve equipment in advance and then double and even triple check availability as the workshop plans progress.

Following is a list of media equipment requirements for each module. Media planning should be based on and correlated with other facilities planning.

Module	Media
1-2	Standard Equipment*
3	Standard Equipment, 16 MM Movie Projector
4-11	Standard Equipment
12A-15A**	Standard Equipment
12B-13B**	Standard Equipment
14B	Standard Equipment, Filmstrip Projector and Synchronized Cassette Tape Recorder
15B	Standard Equipment
16-18	Standard Equipment

*Standard equipment includes: Overhead projector, blank transparencies, transparency markers, 2 easels with newsprint and markers, masking tape, blackboard, chalk and erasers, and 3x5 cards.

**As the A and B sessions occur simultaneously, two sets of standard equipment will be needed.

Prizes and other materials

In Module 12B a prize should be awarded to the group with the most job titles. An appropriate prize is candy to be shared by the winning group. In case of a tie, it is best to be prepared with two equal prizes. In Module 16 a prize should be awarded to the participant with the most experience. The prizes should be gift wrapped if possible.

For Module 15A it will be necessary to purchase a snap-together model vehicle.

If the training team wishes to acknowledge the helpfulness of the site coordinator, a small gift of appreciation is appropriately given at the end of Module 18.

Chapter Four: Setting Up Workshop Facilities

D. Lodging Arrangements

If it is necessary to find lodging for participants and trainers, the site coordinator should make the arrangements for a block of rooms either on campus or in a nearby motel. If participants will be responsible for their own lodging costs, these arrangements need to be spelled out in the cover letter. Participants should contact the hotel directly requesting to be placed in the "Career Education Block."

Sharing Rooms

It is likely that double rooms will be most feasible, for the sake of budget, and also to facilitate the interaction of people over the intensive training period. Participants should indicate their perference for a double or single room, and indicate a roommate choice, if desired. This information can be mailed directly to the motel using a return mail card which most motels provide. These return cards can also be stamped "Career Ed" for easy identification, and should be mailed out with the orientation materials about three weeks prior to the workshop.

Residential Settings

For workshops that are held on the campus of residential institutions, it is possible that on-campus rooms in the dormatories may be available.

The advantage of having the lodging and training sites adjacent includes convenience, elimination of transportation costs, and the intimacy of association with other educators of the deaf and perhaps deaf children. The inconveniences of a ban on alcohol use, and distance from a metropolitan area may also be considered. Access to a bar, an ice machine, television or other entertainment, and coffee early in the morning may have an impact on participant (and trainer!) comfort.

Chapter Five: Preparing to Teach

Review

In getting ready to train local school participants, the delivery skills which were taught in the Regional Workshop for CE Facilitators should be reviewed thoroughly. The outline and posttest are found in Appendix C.

A thorough knowledge of the content of the CE and planning modules will be assured by reading the narration and handouts, practicing all the exercise sheets, and studying the in-depth information in the Supplement to the Trainer's Manual, found in Section D.

Division of Labor

To make most efficient use of the talents and strengths of the trainers, each member should choose the modules they feel they could do best. That decision may be based on interest and content expertise, as well as length of practice and experience with the strategies.

When several team members desire to present a module, they should work out an agreeable arrangement for cofacilitating. It is hoped that for each module, at least two trainers will be available. One person may serve as "leader" while the other may cofacilitate. For guidelines on how to co-lead a module, refer to materials in the Delivery Skills Workshop, Session D.

For those modules which no one wants to present, the team members may trade off for more desirable assignments, draw straws or be assigned by the team leader. Ultimately the team leader should be able to present any of the modules and should serve as backup in case of illness of one of the trainers on the day of the workshop.

Roadmap of Content and Modules

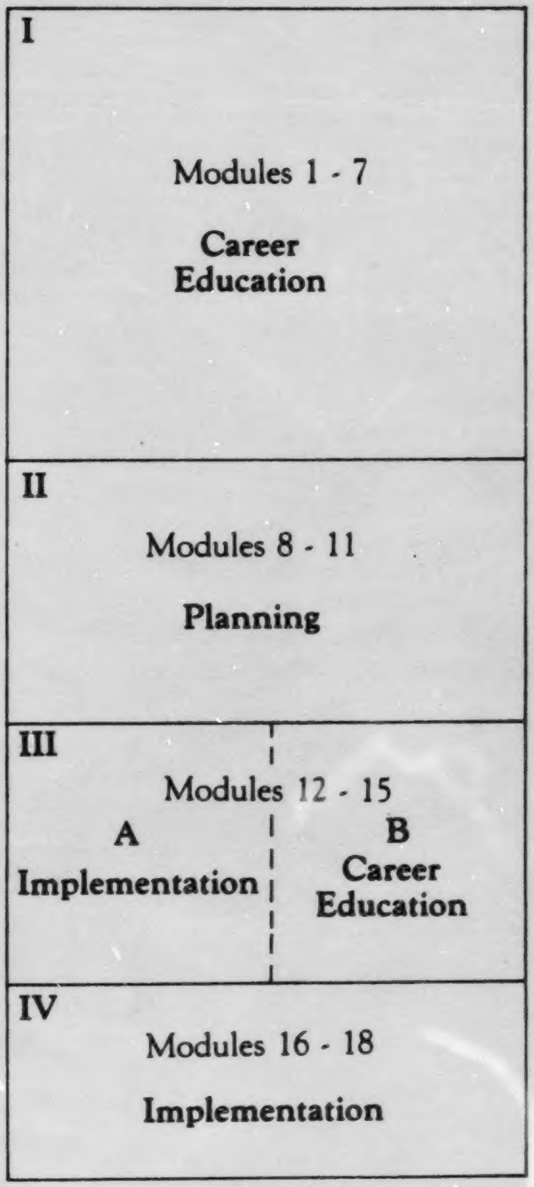
I. These modules provide administrators, teachers and counselors with basic career education background. New concepts include stereotyping, infusion of the CCEM model and collaboration with community programs.

II. These modules provide administrators, teachers and counselors with basic planning background. Appreciation for a systematic approach and a common language for the planning process should result.

IIIA. Administrators will be exposed to the NPCE implementation process and learn how to lead a group to consensus.

IIIB. Teachers/Counselors will receive indepth practice in curriculum infusion of the elements of the CCEM.

IV. All team members will prepare an implementation plan for their most urgent goals.


I
Modules 1 - 7
Career Education
II
Modules 8 - 11
Planning
III
Modules 12 - 15
A
Implementation
B
Career Education
IV
Modules 16 - 18
Implementation

Module 1: INTRODUCTION

Trainer Goal: Provide an overview of the workshop and an opportunity to share attitudes about and programs for career development for the hearing impaired.

Learner Outcomes

1. Demonstrate an awareness of the workshop goals, schedule, and format.
2. Demonstrate an awareness of other participant's career education efforts and identify similarities to their own program.
3. List several stereotypes related to deafness or deaf people and relate them to career development of the hearing impaired.

Advance Preparation: Team leaders should be directed to prepare a brief (5-10 min.) explanation of what they are currently doing for career education in their school or program, with handouts, if possible.

Materials/Resources

T-1-1 "Two National Working Conferences" (book)

T-1-2 "Needs Identified" (book)

T-1-3 "Goals" (book)

T-1-4 "Roadmap of Content and Modules" (book)

T-1-5 "Objectives for Module 1 (book)

HO-1-1 "Concept Outline" (book)

Proceedings of Two Working Conferences

Newsprint or chalkboard

3x5 cards

All Facilitators

Concepts

Career Development

Career Education

Stereotyping

PROCEDURES:

Time Visuals Trainer Narrative

0:00 A. Welcome participants to the workshop.

1. Announce the schedule for meals, dorms, breaks, and other housekeeping details. Also announce location of restrooms and ground rules for smoking, coffee, feedback, and interpreter use. Express the assumption that as adults, they will be responsible for their own comfort throughout the workshop.
2. Round of applause for site coordinator(s).

B. History of and rationale for "Career Education and
Planning Skills." (Use transparencies as indicated.)
Most of you are aware that in 1978, MSSD/NTID co-hosted
two Working Conferences on Career Development for
the Hearing Impaired. The first working conference
T-1-1 was held at MSSD in February, and the second was held
at NTID in September. Participants at the first conference
were invited primarily from residential schools
for the deaf, while those at the second conference
were primarily from day, oral, and mainstreamed programs.

The conferences were established to address five major goals:

1. To clarify career education concepts.
2. To increase awareness of the relevance of career education for the hearing impaired.

Time Visuals Trainer Narrative

3. To share what has been learned about implementing career education.
4. To identify issues needing further attention and development.
5. To obtain suggestions for ways to address the most urgent issues.

If you have not yet obtained a copy of the Proceedings of these two conferences, copies are available from MSSD. Rather than go into depth on the results of the conferences, which you can read for yourselves, let me indicate how we got from the working conferences to this point.

T-1-2 Conference participants identified two most urgent and important issues needing attention and development with respect to career education for the hearing impaired: inservice training for staff in career education, and the development of a comprehensive plan for the schools to implement career education programs.

Following the first conference, members of the administration of NTID and MSSD decided to formalize the working relationship thus far established, by funding of the National Project on Career Education (NPCE). The NPCE was designed to respond to the needs identified in the first conference re-affirmed at the second conference.

It was not possible - financially or in other ways - for the Project to serve the entire country directly in terms of all training needs. We determined, therefore, to impact upon representatives of schools in most states who would have easier access to programs needing assistance, employing the "ripple effect." Schools with successful career education programs developed and in place were scheduled to offer workshops within their school or to local schools within the state within two years. Schools with career education programs under development were allowed more than two years if necessary.

The NPCE examined various strategies to assist the field to meet its expressed needs and finally settled on the approach which you will be experiencing in the workshop, "Career Education and Planning Skills," which addresses the following:

Time	Visuals	Trainer Narrative
		1. Career education content, in terms of concept development, values clarification, infusion techniques, and related topics, and
		2. Planning skills, in terms of the processes, content, and evaluation of a program in career education.
	HO-1-1	Refer participants to HO-1-1, "Concept Outline."
0:05	T-1-3	C. Show workshop goals, T-1-3.
	T-1-4 T-1-5	D. Present the workshop roadmap, T-1-4, and then present the objectives for Module 1, T-1-5.
0:10		E. School Sharing Time
		1. Cofacilitators should introduce themselves to the group.
		2. Trainer should introduce each team leader in turn. Each program presentation should be limited to ten minutes, and include the team members, the program components and materials, as well as source of funds. It there is time, the trainers may share their program description also.
1:10		F. Stereotypes
		1. The trainer should note participant's cummulative long experience with deafness and ask for stereotypes or myths which participants have heard about deaf people or deafness. Cofacilitator

Time Visuals Trainer Narrative

should list stereotypes on board or newsprint as they are contributed.

Examples: Deaf people can't drive the cars.

Deaf people are always mute.

2. Ask participants which stereotypes of those listed will have an impact on the career development of hearing impaired individuals, and why.

3. Challenge participants to analyze their own program and describe how they are perpetuating or intervening in stereotypes which students and others have.

1:25 G. Workshop Processes

1. Explain that the workshop structure will require a sharing of experiences, particularly within school teams. If an individual school's unique problems need further discussion, the co-facilitators will be available after the modules.

Hand out the feedback cards

2. Explain that the feedback cards (3x5 cards) may be used to record questions and comments for the trainer.

3. List and demonstrate any unusual signs which will be used in workshop, e.g., career, technical, implement, module, feedback, infusion, cofacilitator, session.

Time Visuals Trainer Narrative

4. Explain that the notebooks should be brought to each module. The readings for each module are located in the notebooks. All worksheets or handouts distributed during the workshop should be placed appropriately in the notebook.

1:30 H. Adjourn

NOTE: Collect all biographical data forms and tally the responses for T-2-5.

CONCEPT OUTLINE

Career Education/Planning Skills Workshop

I. Career Development
   - A. Stereotyping
   - B. Internal/External Barriers

II. Career Education
   - A. Work
     - 1. Data
     - 2. People
     - 3. Things
   - B. CCEM Model
     - 1. Self Awareness
     - 2. Educational Awareness
     - 3. Career Awareness
     - 4. Economic Awareness
     - 5. Decision-Making
     - 6. Beginning Competency
     - 7. Employability Skills
     - 8. Attitudes and Appreciations
   - C. Stages
   - D. Infusion
   - E. Life Goals
   - F. Integration
   - G. Resources
     - 1. Print
     - 2. People
     - 3. Media

III. Planning
   - A. Systematic Planning
   - B. Collaboration/Cooperation
   - C. Needs Assessment
   - D. Power
   - E. Support System
   - F. Goal Setting
   - G. Evaluation
   - H. Communication

IV. Implementation
   - A. Decision-Making
     - 1. IGT
     - 2. NGT
     - 3. Delphi Technique
   - B. Incentives
   - C. Team Development
   - D. Technical Assistance

Trainer's Manual: Career Education and Planning. MSSD/NTID National Project on Career Education, 1980.

Module 2: SELF AWARENESS

Trainer Goal: Focus discussion on self awareness as the basis for career development.

Learner Outcome

1. Describe the importance of self awareness to the career development process.

Advance Preparation: Summarize on transparency T-2-5, the data from the pre-workshop Biographical Form.

Materials/Resources

T-2-1 "Objective for Module 2" (book)

T-2-2 "Valuing Processing Questions"

T-2-3 "Lecturette on Valuing" (book)

T-2-4 "Lecturette on Self Concept" (book)

T-2-5 "Who We Are"

Values Clarification by Simon, Howe, and Kirschenbaum (optional)

Concepts

Self Awareness

Values Clarification

PROCEDURES:

Time	Visuals	Trainer Narrative
0:00	T-2-1	A. Present the objective for Module 2.

B. Values Voting

1. Explain to participants that one way to clarify our values about a concept or any issue is to participate in a strategy called "values voting" which is taken from the book Values Clarification*, by Simon, Howe and Kirschenbaum.
2. Directions: Participants vote by raising their hand if they agree somewhat or can relate to the statement. The valuing process requires a public response, so they should look around and see how other participants are voting, too.
3. Trainer should read each statement and pause only for a show of hands.

   "How many people here think that---"

   a. You would change your lifestyle if your income doubled? tripled?

   b. Women should stay home and be primarily wives and mothers when their children are very young?

   c. You do your best work under pressure?

---

*Simon, S.B. L. Howe and H. Kirschenbaum: Values Clarification: A Handbook of Practical Strategies for Teachers and Students. (Hart: NY) 1972.

Time Visuals Trainer Narrative

d. Working with a group is preferable to working alone?

e. You would continue to work for a boss you dislike?

0:10 T-2-2 4. Processing Questions

Ask the participants the following questions from T-2-2:

a. Which questions were most difficult to answer? Why?

b. Which questions required risk taking?

c. Did any questions draw a surprising response from the group? Which?

d. Why is it necessary to assess our values toward work as a starting point for career education? (Our values determine our career goals.)

0:15 C. Lecturette on the Valuing Process

1. The trainer should cover the following points,

T-2-3 using T-2-3.

- There will always be differences in attitudes and values in any group of people. We are a product of our upbringing.
- Your students, colleagues, and community people will also have different values.

Time Visuals Trainer Narrative

Exploration can bring people together on the values they hold.

- The steps in valuing include:
  - choosing from among alternatives
  - prizing your choice by public declaration
  - acting or behaving consistently with your choice.

2. Ask participants how they teach work values in their programs.

0:20 D. Who Are You?

1. Direct participants to form dyads (pairs) with someone they don't know and ask their partner, "Who are you?" ten times. Then reverse roles. Tell them they should be good listeners, but they don't need to write down responses. The question should be repeated before each response. (Maximum time: 5 minutes.)

0:25 2. Processing Questions

Return to large group for processing questions:

a. What kinds of responses did you use to the question: "Who Are You?" (work roles, family roles, name)

b. Was the kind of response you gave to the seventh "Who Are You?" any different from the first?

Time **Visuals** **Trainer Narrative**

c. Were your self descriptors generally positive? Why do you think this is so?

d. In what way do your responses reflect your values? (Most people choose to reveal things they value about themselves.)

e. Why would this be a good activity to use with handicapped students? (To build positive self concept.)

f. How would you infuse the activity with your students? With what other audiences would you use the activity?

0:35 3. Lecturette on Self Concept

T-2-4 The trainer should cover the following points using transparency T-2-4.

- You need to know who you are before you can decide what you want to become.
- Positive self concept is the basis for all achievement and growth.
- Handicapped students especially need success-oriented experiences structured into their school activities to build and maintain self-concept.
- Career education experiences can provide for realistic and positive self-concept development.

Time	Visuals	Trainer Narrative
0:40	T-2-5	E. Who We Are
		1. The data from the Biographical Forms was tallied to develop an awareness of who we are.
		2. Trainer should reveal the biographical data tallied from pre-workshop sheets using transparency T-2-5.
0:45		F. Adjourn

Module 3: BARRIERS TO CAREER DEVELOPMENT

Trainer Goal: Inform participants about internal and external barriers to the career development of disabled workers.

Learner Outcomes

1. Describe the possible barriers that could influence the career development of disabled individuals.

2. Clarify their perceptions of the importance of career education for hearing impaired students.

3. Demonstrate awareness of research results on perceptions of educators of the deaf toward career education goals.

Materials/Resources

T-3-1	"Objectives for Module 3" (book)
T-3-2	"Film Exercise Sheet" (class)
T-3-3	"Cartoon"
HO-3-1	"Confessions of a Seventh Grader" (book)
HO-3-2	"Perceptions of Educators of the Deaf Toward Career Education Goals for Secondary Level Students" (book)
M-3-1	Film: "These People Are Working" (captioned)

Cofacilitator

16mm movie projector

Concepts

Career Development

Internal/External Barriers

PROCEDURES:

Time Visuals Trainer Narrative

0:00 T-3-1 A. Present the objectives for Module 3 using transparency T-3-1.

B. Role Model

1. Remind participants of the pre-workshop reading on Dr. Nansie Sharpless. We have selected her as a role model of high achievement for hearing impaired and female workers. In the article she made several statements about barriers to her career development potential which she faced and overcame. We'll return to her case after viewing a film called "These People Are Working."

C. Exercise Sheet*

T-3-2 1. Hand out the "Film Exercise Sheet," T-3-2.

2. Explain that the film will be stopped briefly after each worker in the film finishes telling his/her story. While the film is stopped, participants will briefly write on the exercise sheet the following information:

   a. things that contributed to each worker's success.

   b. things that were external or internal barriers. Explain that internal barriers are attitudes within the handicapped person.

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*This activity was adapted from The 1978 Annual Career Education Handbook for Trainers. Carolyn Raymond (Editor), Palo Verde Associates, Tempe, AZ, 1978.

Time	Visuals	Trainer Narrative
0:05	M-3-1	D. "These People Are Working"
		1. Show film to end of attorney's story. Stop after "I feel the only thing I can't do is see" for up to 2 minutes.
		2. Show next worker (nurse). STOP after "Whatever ambitions you want can be fulfilled if you have the will to do it."
		3. Run film to end. Ask participants to complete their responses on the film exercise sheet including comments based on reading the paper on Nansie Sharpless.
0:30		E. Processing
	T-3-3	1. Other people's perceptions about us influence our self concept and create internal barriers to career development. Ask how this was reflected in the film or the reading. Show Miss Peach cartoon (T-3-3) as illustrative of this point.
		2. External barriers for handicapped workers are slowly disappearing because of legal mandates. Ask participants to relate this to the film or the reading.
		3. Schools could do more to give students the self confidence to achieve. Ask how this was brought out in the film or the reading. Ask how partici-

Time **Visuals** **Trainer Narrative**

pants attempt to intervene in the stereotyping which their students experience?

HO-3-1 4. Request that participants read "Confessions of a Seventh-Grader"* (in notebooks) before returning from lunch. This reading exemplifies one school's failure to meet students' needs.

0:40 F. Research

1. In this workshop we will emphasize the benefits of CE for deaf students. We need to be aware of how educators for the deaf feel.

HO-3-2 2. Refer participants to the research study by Ed Maruggi, HO-3-2 (in notebooks) and summarize the paper with the following points:

   - o Educator of the deaf place a high emphasis on career education goals in their schools.
   - o Vocational and academic faculty demonstrated high agreement as to the importance of particular career education goals.
   - o Educators supported an educational program that would include emphasis on both student goals and direct service goals for career education.

*This activity was adapted from the The 1978 Annual Career Education Handbook for Trainers. Carolyn Raymond (Editor), Palo Verde Associates, Tempe, AZ, 1978.

Time Visuals Trainer Narrative

3. Educators of the deaf have a variety of priorities when addressing career education. In another study*, stereotyping was ranked lowest on a scale from 1 to 10 by administrators in schools for the deaf. We feel this is unfortunate. Our workshop, therefore, addresses this concern in the hopes you'll put high priority on the intervention strategies of Career Education which are needed to overcome the effects of stereotyping.

0:45 E. Adjourn

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*Twyman, Lee and Sue Ouellette. "Career Development Programs in Residential Schools for the Deaf: A Survey" American Annals of the Deaf. 123(1) February, 1978, 10-17.

CONFESSIONS OF A SEVENTH-GRADER*

We like this boy. You probably will, too--but you'll find it tough to take if you suspect he could be in one of your schools.

No, I'm not very good in school. This is my second year in the seventh grade, and I'm bigger and taller than the other kids. They like me all right, though, because ouside I can tell them how to do a lot of things. They tag around me and that sort of makes up for what goes on in school.

I don't know why the teachers don't like me. They never have very much. Seems like they don't think you know anything unless you can name the book it comes out of. I've got lots of books in my room at home--books like Popular Science, Mechanical Encyclopedia, and the Sears' and Ward's catalogs, but I don't very often just sit down and read them through like they make us do in school. I use my books when I want to find something out, like whenever Mom buys something secondhand. I look it up in the catalogs first and tell her if she's getting stung or not. I can use the index in a hurry.

In school, though, we've got to learn whatever is in the book, and I just can't memorize the stuff. Last year I stayed after school every night for two weeks trying to learn the names of the Presidents. Of course, I know some of them like Washington and Jefferson and Lincoln. But there must have been 30 altogether, and I never did get them straight.

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*Nations Schools, Editor's Notes: Vol. 91, No. 2, February, 1973.

Trainer's Manual: Career Education and Planning Skills. MSSD/NTID National Project on Career Education, 1980.

I'm not too sorry, though, because the kids who learned the Presidents had to turn right around and learn all the vice presidents. I am taking seventh grade again, but our teacher this year isn't so interested in the names of Presidents. She has us trying to learn the names of all the great American inventors.

I guess I just can't remember names in history. Anyway, this year I've been trying to learn about trucks, because my uncle owns three and says I can drive one when I'm 16. I already know the horsepower and number of forward and backward speeds of 26 American trucks, some of them diesels, and I can spot each make a long way off.

It's funny how that diesel works. I started to tell my teacher about it last Wednesday in science class when the pump we were using to make a vacuum in a bell jar got hot, but she said she didn't see what a diesel engine had to do with our experiment on air pressure so I just kept still. The kids seemed interested though. I took four of them around to my uncle's garage after school, and we saw the mechanic, Gus, tear a big truck diesel down. Boy, does he know his stuff!

I don't do very well in school in arithmetic, either. Seems I just can't keep my mind on the problems. We had one the other day like this: If a 57 foot telephone pole falls across a cement highway so that 17 feet extend from one side and 14 9/17 feet from the other, how wide is the highway?

That seems to me like an awfully silly way to get the width of a highway. I didn't try to answer it, because it didn't even say whether the pole had fallen straight across or not.

Even in shop I don't get very good grades. All of us kids made a broom holder and a bookend this term and mine were sloppy. I just couldn't get interested. Mom doesn't use a broom anymore with her new vacuum cleaner, and all our books are in a bookcase with glass doors in the parlor. Anyway, I wanted to make an end gate for my uncle's trailer, but the shop teacher said that meant using metal and wood, both, and I'd have to learn to work with wood first. I didn't see why, but I kept still and made a tie rack at school and the tail gate after school at my uncle's garage. He said I saved him $10.

Dad says I can quit school when I'm 15, and I'm sort of anxious to, because there are lots of things I want to learn how to do and, as my uncle says, I'm not getting any younger.

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PERCEPTIONS OF EDUCATORS OF THE DEAF TOWARD CAREER EDUCATION GOALS FOR SECONDARY LEVEL DEAF STUDENTS

By Edward A. Maruggi, Ph.D.

Perceptions and preferences of secondary-level educators were sought. Input from administrators, vocational, and academic faculty of residential and day programs was gained regarding their perception of career education goals for secondary deaf students. A Likert scale attitude questionnaire was used as the survey instrument to ask how important each goal SHOULD BE. Administrators were found to be more in agreement as to the IS and SHOULD BE condition than other sub-groups, reflecting a greater level of satisfaction with the current educational emphasis at their schools. Vocational and academic faculty were consistent in their SHOULD BE goal emphasis which indicates concordance as to the importance of particular goals. In summary, educators indicated that the current emphasis toward career education goals should be assigned a higher level of importance than presently exists.

INTRODUCTION

Investigation of the topic was prompted by the general belief that in spite of apparent high level support, as indicated in studies by Brickell and Aslanian (1972), Harrison (1972), Ohanneson (1973), and Baker (1972), the career education concept will not be accepted blindly and without some reluctance or conflict on the part of American educators or the general public. The reasons are obvious. Many educators will not want to accept the basic changes that will need to take place. Most educators will have to adopt new methods of professional performance and adapt to new challenges that career education represents. Program planning, teacher preparation, inservice training, cooperation of public and private program directors, parents, agencies in the public and private sectors of the economy and government will be required if career education is to be "infused" into the curriculum.

Trainers Manual: Career Education and Planning Skills. MSSD/NTID National Project on Career Education, 1980.

Hopefully, this study will become the basis for objective communication among secondary-level hearing-impaired educational programs with regard to their commitment to students and career education. Such communication could bring about curriculum and program changes that will provide experiences designed to assist students in making pertinent decisions about life and in performing life roles.

PURPOSE OF THE STUDY

The purpose of the reserach was to compare the perceptions of faculty and administrators of programs for hearing-impaired in the United States toward the goals of career education. Questions regarding the pertinence of secondary education is being questioned all over the world. According to UNESCO (1974) secondary programs are growing faster than primary. However, the great improvement in quantity had been no guarantee of quality. A survey of 63 countries revealed that almost all had anxieties about the mismatch between education and the needs of employers. The United States reply to the questionnaire was, "About 50 percent of our high school students are in the so-called general track which prepares them neither to go to college nor to enter a job".

A panel chaired by James S. Coleman (1973) completed a report "Youth in Transition" which concluded that secondary schools serve well in only one way: cognitive development--but do not assist youth in their transition into adulthood.

There are no ready-made panaceas or answers to these problems. That if the U.S. Office of Eduction (1971) has stated that career education is a comprehensive educational program focused on careers, which begins in grade one or earlier, and includes career awareness, orientation, exploration and job preparation for all students. Thus career development and specifically career education may be viewed as a construct to reform the educational process. Therefore, it would seem appropriate for secondary level programs for hearing-impaired students to evaluate and clarify their present goals and specifically to distinguish between the real and the supposed, in order to determine the effectiveness of progress toward these goals.

POPULATION

Participating schools in the study were identified based on the criteria that (1) they offer a secondary level curriculum, and (2) that they serve a minimum of 150 deaf students. This information was obtained from the American Annals of the Deaf: Directory of Programs and Services. Seventy-two programs were contacted initially, of which 58 elected to participate in the study itself. Approximately 900 questionnaires were sent to administrators, and academic and vocational teachers in each of the 58 schools. A response rate of 80% was obtained. Five hundred and forty educators responded from residential schools and 172 from day programs. Sixteen percent (n=114) of the total responses were from administrators, thirty-five percent (n=249) from vocational teachers, and forty-nine percent (n=349) from academic teachers.

Survey Instrument

An instrument developed by Grambsch and Gross (1968) was transformed into a 39 item questionnaire for this study. Thirty (30) items were selected on the basis of their being generally considered goals of career education. These goals (items) have been tested in a previous pilot study, and validated by a panel of jurors. The remaining nine (9) goals were categorized as "other educational goals" and are not described in this paper. A Likert scale was used in the questionnaire to classify perceptions of the respondents and varied from, (5) "of absolutely top import," to (1) "of no import." The instrument sought current perceptions and future preferences toward career education goals by asking how important each of the thirty (30) career education goals currently IS in each respondent's school, and how important each SHOULD BE.

The items representing the thirty (30) career education goals were classified under three broad groupings. Ten items fell under each of the following groups:

(a) Student-Expressive goals - the attempt to change the student's identity, characteristics, or attitude in some fundamental way.

(b) Student-Instrumental goals - the attempt to equip the student to perform something specific for society he/she will be entering, or to operate in a certain manner in the society.

(c) Direct-Service goals - the direct and continuing provision of service to students, faculty, and/or the community.

Findings

(a) Ranking of perceived (IS) and preferred (SHOULD BE) career education goals.

Table 1 identifies each career education goal listed in the questionnaire and the ranking as perceived and preferred by the total body of educators. The ranking of the goals actually being pursued is listed under the heading of "IS" and the preferred ranking of the same goals are identified under "SHOULD BE". For example, educators ranked "Offer programs for students seeking higher education" as first among the actual career education goals of their school, but preferred that it rank 18th as a goal. The type of goal is also identified in the table as to whether it is a student-expressive (SE), student-instrumental (SI), or direct-service (DS) goal of career education.

TABLE

EDUCATORS PERCEIVED (IS) AND PREFERRED (SHOULD BE) GOAL RANKING

EDUCATIONAL GOALS	*TYPE OF GOAL	Rank IS A GOAL	Rank SHOULD BE A GOAL
Offer programs for students seeking higher education.	SI	1	18
Produce a well-rounded student; one whose whole physical, social, moral, intellectual, and aesthetic potentialities have been cultivated.	SE	2	1
Prepare students specifically for useful careers.	SI	3	17
Maintain programs which include cooperative work experience and work-study opportunities for students who want and need it.	SI	4	5
Emphasize individualized instructions to assist the student in attaining his/her career goals.	SE	5	11

TABLE 1 (continued)

EDUCATIONAL GOALS (continued)	*TYPE OF GOAL	Rank IS A GOAL	Rank SHOULD BE A GOAL
Every student will leave the educational system possessing a marketable skill.	SI	6	7
Make career education an integral part of the curriculum structure.	DS	7	4
Provide a curriculum specific enough to meet the needs of students seeking full time employment after graduation or before.	SI	8	9
Develop in the student, the ability to make informed decisions regarding his/her career choice.	SE	9	2
Provide occupational information to the student to increase his/her alternatives for career selection.	SE	10	8
Permit the student to explore career clusters in depth based on his/her interests, values, and abilities.	SE	11	6
Promote positive attitudes toward all careers and their contribution to society.	SE	12	16
Encourage teachers to incorporate "hands-on" types of activities in the classroom.	SI	13	25
Provide the student with "in-depth" vocational preparation.	SI	14	22
Develop an extensive counseling/guidance function to enhance the student's career choice.	DS	15	3
Provide exploratory experiences in vocational classrooms, labs, and shops for students not enrolled in occupational preparation programs.	SI	16	20

TABLE 1 (continued)

EDUCATIONAL GOALS (continued)	*TYPE OF GOAL	Rank IS A GOAL	Rank SHOULD BE A GOAL
Provide the student with educational experiences which will show how the world of work can be utilized to help clarify self.	SE	17	13
Utilize a wide variety of resources and services in the school and community to maximize the student's career development potential.	DS	18	10
Produce a student who understands that career development is life long and based upon a sequential series of educational and occupational choices and services.	SE	19	10
Permit each student to realistically assess personal attributes as part of setting life goals.	SE	20	15
Actively seek public or private funding so that the career education concept may be continued/implemented.	DS	21	26
Maintain an office of business/industry liaison to ensure student placement.	DS	22	27
Promote an understanding of the career education concept among parents, educators, and the community.	DS	23	12
Enable students to evaluate career clusters or families of occupations as a pre-requisite to career selection.	SE	24	24
Conduct follow-up studies on students as a program evaluation/student evaluation function.	DS	25	23
Provide in-service training for teachers as a pre-requisite for career education implementation.	DS	26	19

TABLE 1 (continued)

EDUCATIONAL GOALS (continued)	*TYPE OF GOAL	Rank IS A GOAL	Rank SHOULD BE A GOAL
Feed back student follow-up information to the school staff.	DS	27	21
Encourage the return of dropouts into special programs for job preparation.	SI	28	28
Ensure relevance of educational programs by overseeing each with an advisory committee.	DS	29	29
Provide occupational training for part-time adult students through extended servcies, evening programs and/or specialized short courses.	SI	30	30

*Student-Expressive Goal, Student-Instrumental Goal, Direct-Service Goal

There is considerable difference as to the present and the ideal regarding the level of importance of different career education goals. While it is beyond the scope of this paper to describe the response of each of the sub-groups of respondents (administrators, vocational faculty, and academic faculty), it is interesting to note that administrators were in more agreement as to the "IS" and "SHOULD BE" condition that the other surveyed sub-groups, presumably reflecting a greater level of satisfaction with the levels of priority attached to each career education goal by their schools.

(b) Significance of the ten highest ranked goals by the total body of educators.

(Indicated in Table I).

(1) Produce a well rounded student.

It is quite clear that respondents feel it is necessary to produce the "total" person with cognitive as well as moral, social, and aesthetic development.

(2) Students ability to make informed decisions.

The implication is that students do not currently possess decision making skills, and decisions that are made are apparently determined without sufficient relevant information and/or appropriate seeking and clarification of values.

(3) Develop a counseling/guidance function.

This is a direct-service goal and indicates that students need assistance from professionally trained counseling/guidance personnel to aid them in their career development.

(4) Make career education an integral part of the curriculum structure.

There is a tendency for educators to believe that career education should be "infused" into the curriculum. Methods for "infusion" can be accomplished through the efforts and resources of the school and the community.

(5) Maintain work experience program.

The UNESCO and Coleman studies indicate a need to meet the needs of employers. Learning by doing seems to be an appropriate step to meet that need.

(6) Permit students to explore career clusters.

The U.S. Office of Education has developed 15 clusters of occupations in which more than 20,000 occupational titles fall. Teaching about career clusters will allow students the opportunity to learn the broad aspects of a large variety of careers that will eventually enhance making informed decisions about their future.

(7) Every student should possess an exiting marketable skill.

The goal of career education is to produce a student who has the skills to enter the job market or to continue to higher education. It is intended that each student possess a skill for immediate job placement.

(8) Provide occupational information to students.

Through an appropriate counseling/guidance function and through community resources the student should receive career related information to assist them in the decision-making process.

(9) Curriculum should meet the needs of students seeking full-time employment after or before graduation.

For some students completing a high school education is not possible. Therefore, they should possess minimum entry level skills for employment. Programs may need to be revised to accomplish this goal.

(10) The total community should be involved if the student's total career development is considered. School teachers, administrators, counselors, parents, employers, municipal agencies, and government should be involved in the planning, and implementation of career education.

Of significance also is that the ten highest ranked preferred goals indicate an equal emphasis on direct-service goals (3), student-expressive goals (4), and student-instrumental goals (3). The educators apparently feel that the resopnsibility of changing student characteristics and attitudes, providing them with skill training, and providing a direct service to them are equally important to the total career development process.

Conclusions and Recommendations

The following conclusions were drawn as a result of the findings.

1. A high positive reaction toward career education goals was held by all surveyed groups. Educators of hearing-impaired students, inclusive of administrators, academic, and vocational faculty, indicated that the current emphasis toward career education goals is presently of less than medium importance (x = 2.869) and the future emphasis should be of great importance (x = 4.037).
2. In the study, vocational and academic faculty were extremely consistent in their preferred goal emphasis. Both groups ranked eighteen (18) of the first twenty (20) preferred goals in a very similar manner as to the importance of particular career education goals. Hopefully, this will make career education planning, inservicing, and implementation an easier task for administrators of these programs.
3. Educators supported an educational program that would provide equal emphasis on student-expressive, student-instrumental, and direct-service goals of career education.

In light of the findings and conclusions of this study the following recommendations are offered.

1. A career development program should be developed for secondary level deaf students which will assist them in gaining insight into all levels of the world of work, from unskilled to professional careers.
2. Schools should offer courses and experiences which will allow each student to (1) view himself positively, (2) identify and clarify values and, (3) learn decision-making skills as a prelude to career exploration and preparation.
3. Career guidance personnel and advisors should assist each student in the development and monitoring of a personal career development plan.
4. Administrative should provide inservice training for teachers to infuse the "world of work" into the curriculum.
5. Secondary administrators should articulate their programs with elementary, middle school, and junior high schools to assure the student's smooth transition through the awareness and exploration phases of career education.

While career education has the potential for improving the formal preparation of young deaf persons in our society, the support of educators is required to implement and meet the career development needs of this population. The importance of a well planned coordinated program in the schools is the critical link between the deaf individual and his/her full participation in the attainment of life goals. The concept of career education, as part of total career development, can provide that connection which will afford the deaf student the opportunity to become a self-actualized member of the community.

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Module 4: TALKING THE SAME LANGUAGE

Trainer Goal: Clarify the concepts and vocabulary used in career education.

Learner Outcomes

1. Define "work" and describe how to operationalize the concept with students.
2. Distinguish between
   a. work/career/job
   b. career education/career development
   c. career education/vocational education
3. Appreciate the need for a positive value toward work.

Materials/Resources	Concepts
T-4-1 "Objectives for Module 4" (book)	Work
T-4-2 "Hoyt's Definition of Work"*	Career Education
T-4-3 "More Definitions"	
HO-4-1 "Definitions" (class)	
HO-4-2 "Concept Outline with Definitions" (class)	
Overhead projector	
Newsprint	
Markers	

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*This transparency was adapted from The 1978 Annual Career Education Handbook for Trainers. Carolyn Raymond (Editor), Palo Verde Associates, Tempa, AZ, 1978.

PROCEDURES:

Time	Visuals	Trainer Narrative
0:00	T-4-1	A. Present the objectives for Module 4 using transparency T-4-1.
		1. Ask participants why it is important to have consistent definitions. Accept their reasons and include, if not mentioned, the following three reasons:
		a. Same language is necessary for coordination when developing a new program.
		b. Communication between programs will be facilitated.
		c. In writing grant proposals, author must use definitions consistent with those used by U.S. Office of Career Education.
0:05		B. Defining Work and Work Related Terms
	T-4-2	1. Show transparency T-4-2 with Hoyt's definition of work as follows (Do NOT reveal other definitions) "Work is a conscious effort aimed at producing benefits for oneself and/or others." Ask participants, "Does this agree with your definition?" and discuss any discrepancies.
		2. Form small groups by segregating participants by role (teachers in one group, counselors or administrators in another; or elementary in one

Time Visuals Trainer Narrative

group and secondary educators in another). Each group should have at least 6 people, but not more than 15.

3. Give each group a large sheet of newsprint and a marker. Have participants distinguish between "career" and "job" by listing all the attributes for career on the left side of the newsprint and all the characteristics for job on the right. Allow about five minutes to complete the discussion.

0:15 4. Have each group report out one by one (round robin) a contrasting set of definitions. Example: A career is life long. A job is temporary. Other examples may include the following.

Career

Time extended plan

Sense of mission or a purpose

Serving personal and social goals

Social responsibility

Learning as growth through work

Job

Immediate reward only

Little or no ego involvement

No group consciousness

Making some money

Time	Visuals	Trainer Narrative
	T-4-2	5. Show Hoyt's definition from transparency T-4-2.
		6. Ask for participants' verbal or graphic definition of these terms: Career Education (CE), Career Development (CD), Vocational Education (VE).
0:30	T-4-3	7. Use transparency T-4-3 to differentiate between: a) Career Education vs. Career Development o CD = natural process involving maturation, enhanced by a career ed program o CE = planned program of experiences to enhance CD b) Career Education vs. Vocational Education o VE = formal and informal experiences which lead to acquisition of employability skills o CE = includes VE skill training and other experiences leading to a life long career.
	HO-4-1	8. Hand out "definitions," HO-4-1 and HO-4-2.
0:35	HO-4-2	9. Work Values a) Values are important, even values we instill about work. Reflect back to values clarification, Module 2.

Time Visuals Trainer Narrative

b) Ask participants what value about work we instill in students when we say, "Finish your work so you can go out and play." (Dichotomy between work and play) Ask for any examples where we instill the idea that work is not fun, and identify ways to change that value for work. In case of a lull, add other examples such as "Back to the salt mines," "Work horse," "Keep your nose to the grindstone," "Thank God it's Friday." Ask: "How can we change the negative value toward work?"

c) Note in closing, that a person's work is a fulfillment of self concept. Career Education represents an opportunity to enhance that concept.

0:45 C. Adjourn

HOYT'S DEFINITIONS*

- Work is conscious effort aimed at producing benefits for oneself and/or others.
- Career is the totality of work one does in his or her lifetime.
- Job is an immediate task, paid or nonpaid.

CAREER EDUCATION vs. VOCATIONAL EDUCATION

- VE - formal and informal experiences which lead to acquisition of employability skills
- CE - includes VE skill training and other experiences leading to a life long career

CAREER DEVELOPMENT vs. CAREER EDUCATION

- CD - a natural process involving maturation, one's total experiences
- CE - a planned program of experiences to enhance Career Development

*As defined by Ken Hoyt in several papers.

Trainers Manual: Career Education and Planning Skills. MSSD/NTID National Project on Career Education, 1980.

CONCEPT OUTLINE - DEFINITIONS

I. Career Development - a natural process of maturation

   A. Stereotyping - ascribing to all members of a particular minority the traits which may seem predominant or typical

   B. External Barriers - attitudes of others or physical limitations to career development

   C. Internal Barriers - negative self concept and low aspirations which prevent optimum career development

   D. Values Clarification - a process resulting in growth in self knowledge

II. Career Education - a planned program of experiences to enhance one's career development

   A. Work - conscious effort aimed at producing benefit for onself and/or others

      1. Data - numbers, information

      2. People - friends, family members, other workers

      3. Things - physical objects in the environment

   B. CCEM Model - Comprehensive Career Education Matrix, developed for USDE by the Ohio State University

      1. Self Awareness - knowing one's interests and abilities

      2. Educational Awareness - knowing the training required for a specific job

      3. Career Awareness - knowing the job title for a specific line of work

Trainer's Manual: Career Education and Planning Skills. MSSD/NTID National Project on Career Education, 1980.

4. Economic Awareness - knowing the monetary system and how work is related to money
5. Decision-Making - choosing among alternatives
6. Beginning Competency - basic skills needed to work with data, people, or things
7. Employability Skills - entry level ability within a specific field of work
8. Attitudes and Appreciations - feelings and impressions toward work and one's personal involvement in the world of work

C. Infusion - the combination of both career education objectives and content objectives in one classroom activity

D. Integration - the combination of both career education and vocational skill objectives in one out-of-school activity

E. Cooperation - support of the school's CE program by community groups

F. Resources - materials and people which enrich the CE program offering

1. Print
2. People
3. Media

III. Planning - documentation of decisions and steps needed to reach a goal

A. Systematic Planning - step by step process of documenting decisions needed to reach a goal

B Collaboration - involving community representatives and school personnel in planning a CE program

C. Needs Assessment - measuring how well the CE program aspects compare with the ideal

D. Power - refers to people who can influence the success of the CE program

E. Support System - refers to people who can have positive influence on helping the CE program to succeed

F. Goal Setting - establishing an outcome which will improve the CE program

G. Evaluation - measuring how well the program goals were met

H. Communication - refers to the two-way, open dialog among school and community planners

IV. Implementation - putting plans into action

A. Group Decision-Making - reaching consensus

1. IGT (Interactive Group Technique) - accomplished by brainstorming and voting

2. NGT (Nominal Group Technique) - accomplished by first writing, then sharing opinions and voting

3. Delphi-Technique - accomplished by mailing out questionnaire and voting

B. Task Analysis - break down of specific jobs to be done in order to accomplish a goal, usually used with time lines

C. Incentives - used as rewards and motivation for participation

D. Team Development - growth of feelings of closeness, confidence and a sense of helping among members of the cadre of CE facilitators

E. Technical Assistance - the period of time (6 months to 2 years) after the workshop when participants may need outside resources from the trainers to continue the implementation of their comprehensive plans

Module 5: CCEM MODEL

Trainer Goal: Expose participants to the eight elements of career education and the four developmental stages when these elements may be experienced.

Learner Outcomes

1. List the eight elements of career education.
2. Describe the four developmental stages and three environments involved in career education.
3. Match several developmental tasks to an appropriate stage and element.

Materials/Resources

T-5-1 "Objectives for Module 5" (book)

T-5-2 "CCEM Model" (book)

T-5-3 "Stages of Careeer Development" (book)

T-5-4 "List of CE Tasks" (class)

HO-5-1 "Curriculum Samples for K-12 and Dormitory Skills and Apartment Living" (book)

Concepts

Economic Awareness

Career Awareness

Educational Awareness

Beginning Competency

Employability

Self Awareness

Decision Making

Attitudes/Appreciation

PROCEDURES:

Time Visuals Trainer Narrative

0:00 T-5-1 A. Show the objectives for Module 5 using transparency T-5-1.

B. Lecturette on the CCEM

T-5-2 1. Remind participants about the paper by Vic Galloway which was a pre-workshop reading. Cover the following points using transparency T-5-2:

- The Comprehensive Career Education Matrix (CCEM) was developed for the U.S. Office of Education by the Ohio State University.
- We will use the CCEM as modified by Vic Galloway when he was director of education at MSSD.
- Career Education must take into account the useful learning that occurs in all three environments: school, home, community.
- The content of Career Education has been divided into eight elements. Remember the elements from your reading and their definition. All student outcomes in Career Education can be classified into one of the eight categories or elements.
- These outcomes or learnings can't occur all at the same time. They will gradually occur and become relevant as the student matures.

Time Visuals Trainer Narrative

- o Student maturation encompasses four developmental stages.

T-5-3 2. Define the stages, using transparency T-5-3.

a. Awareness - passive compiling and integrating of information and experiences.

b. Exploration - testing and manipulating concepts and experiences.

c. Preparation - broad development of entry skills.

d. Specialization - development of specific skills within a narrow area.

Explain that these stages represent a hierarchy of human behavior for any learning.

0:20 3. Ask participants, "How many of you had been aware of this model?" The pre-reading was an exercise at the awareness stage.

Point out that in this module the participants will explore the CCEM model by making several applications. Hopefully, they will be at the preparation stage by the end of the workshop, after planning and discussing in depth the application of the elements in classroom activities.

C. Tasks Worksheet

1. Direct participants to work with their school team.

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T-5-4 2. Hand out T-5-4 "List of CE Tasks." Explain that they will convert theory into classroom activities with this worksheet. Tell participants that the tasks should be matched with one of the four stages and one of the eight elements. Remind participants that definitions of elements and stages can be found on HO-4-2. Give teams ten minutes to do the worksheet reaching consensus on each item.

0:30 T-5-4 3. After ten minutes, go over the answers by having teams report their answers in turn. Write on T-5-4 the responses for each teams. Tally the frequency of repeated responses. Answers are:

Stage	Element
1. Exploration	Economic Awareness
2. Awareness	Career Awareness
3. Specialization	Employability Skills
4. Exploration	Decision Making
5. Preparation	Beginning Competency

Encourage teams to defend differing answers. See if consensus can be reached. Do not reveal NPCE answers unless requested to do so, even if the consensus answer is not the NPCE answer.

Time Visuals Trainer Narrative

D. Processing

1. Ask participants if they are already using some of the elements in their career education program or their own classrooms. Which ones and how are they taught?

2. Also ask why these things should be labeled as CE content.

Answer: 1) for program: grants require CE label.

2) for kids: connect content to the world of work.

3) for teachers: better acceptance of CE if content is already part of their curriculum.

3. Note that the CCEM model allows for checking gaps in curriculum comprehensiveness. Later, participants will practice creating objectives for each element.

HO-5-1 4. Refer participants to HO-5-1, "Curriculum Samples"

0:45 E. Adjourn

LIST OF CAREER ED TASKS

Directions: For each task listed below, decide in which stage it typically would be taught. On the line to the left of the task, write the name of the stage, choosing one of these: AWARENESS, EXPLORATION, PREPARATION, or SPECIALIZATION. Then on the line to the right of the task, name the element involved.

Stage	Task	Element
________	1. In the want ad section of the newspaper, look up and compare the wages of a truck driver and a college professor.	1. ________
________	2. Name the job titles of three workers seen at school.	2. ________
________	3. Prior to assignment in a work-study program, fill out a job application in area of specialization.	3. ________
________	4. Following the guidelines for amateur coin collectors, choose ten coins to begin a coin collection.	4. ________
________	5. Learn to drive a car.	5. ________

Trainer's Manual: Career Education and Planning Skills. MSSD/NTID National Project on Career Education, 1980.

CURRICULUM SAMPLES FOR CCEM MODEL

GRADES K-13

Dormitory and Apartment Living

Compiled

by

Marie Egbert

Intern, NTID

Fall, 1979

Trainer's Manual: Career Education and Planning Skills. MSSD/NTID National Project on Career Education, 1980.

LEVEL: KINDERGARTEN BASIC UNIT: HEALTH HABITS

Career Awareness
Which careers may be involved if a person is sick - nurse, doctor, hospital employees, or if a person needs assistance in a medical field - dentist, audiologist, school nurse.

Self Awareness
Personal values and record of performance of food habits, personal eating habits, sleep habits, care of hearing aids and ears, personal cleanliness habits.

Appreciation and Attitudes
Awareness of cause and effect relationship between maintenance of health and how well children practice good health habits.

Decision Making
How parents help children in choosing appropriate snack foods based on good nutrition rules.

Economic Awareness
Relationship of illness to spending of money - paying fees, medicines, etc.

Skill Awareness, Beginning Competence
Equipment and tools used by those involved in health services (things).
Service relationships involved in health services (people).
Data collected to diagnose and prescribe (data).

Employability Skills
Tasks doctors and nurses share; dentists and dental asistants share; audiologist and teacher share.

Educational Awareness
Mother's role as a health "nurse" in the home; why she can't "doctor" the ill person.

LEVEL: FIRST GRADE BASIC UNIT: SCHOOL HELPERS

Career Awareness
Parent(s)' jobs; teachers' jobs; school employees' jobs; other staff and their jobs.

Self Awareness
How the individual can help in the home and the school.

Appreciation and Attitudes
Awareness of the tasks of staff members and how they help each other.

Decision Making
Assigning helping tasks in school based on choice of individuals (volunteers).

Economic Awareness
Pay for helping role as school employee with more pay for harder or longer jobs.

Skill Awareness, Beginning Competence
Tools helpers use.
Services they perform.
Data needed to do the helping job.

Employability Skills
Duties of helpers that require further education and experience than what student currently has.

Educational Awareness
Roles of staff and the power structures outline (who is the boss, who are the helpers).

LEVEL: SECOND GRADE UNIT: COMMUNITY HELPERS SUBJECT: SOCIAL STUDIES

Career Awareness
Identify local community helpers (e.g. shoe repairperson, bus driver, doctor, dentist, police, garbage collector, nurse, fire fighter, airport personnel, hair stylist, zoo keeper, mail carrier, florist, barber, gas station attendant.

Self Awareness
Community helping roles the individual might be involved in or would like to be involved in.

Appreciation and Attitudes
How community helpers help each other - e.g. truck driver and florist, garbage collector and fire fighter.

Decision Making
Problems that occur when a fire occurs and the consequences of the fire.

Economic Awareness
How we pay for services (price of service dependent upon kind of service rendered, paying with cash, check, or by charge; receiving bills in the mail.

Skill Awareness, Beginning Competency
How air pilots help people.

Employability Skills
How police help people in various ways (identification of tasks).

Educational Skills
Education needed to become any of the above community helpers.

LEVEL: THIRD GRADE: UNIT: CLOTHING/PROCESSING SUBJECT: SOCIAL STUDIES

Career Awareness
Sewing in the home and production line sewing; careers in production sewing, including purchasing and merchandising; job titles including seamstress, tailor, buyer, model, drycleaner.

Self Awareness
Satisfaction of career in clothing and one's own interest in those clothes.

Appreciation and Attitudes
Job roles in clothing and consumer satisfaction with new clothes/products.

Decision Making
Selecting proper clothing for weather conditions.

Economic Awareness
Process of clothing production and distribution of services - awareness of payment for work done, piece work vs. hourly wage for sewing activity.

Skill Awareness, Beginning Competence
Unique machinery in clothing production which requires increased skill and abilities.
Services which drycleaner performs.
Information needed to design and sew an outfit for an individual.

Employability Skills
Assess the functions each worker performs in the production of clothing by tracing back what happens when a customer is disatisfied with a flaw in material.

Educational Awareness
How clothing processers learn their trade; issue of job mobility within the structure.

LEVEL: FOURTH GRADE UNIT: SUPERMARKET WORKERS/MONEY SUBJECT: MATHEMATICS

Career Awareness
Name three job titles relating to a grocery store and describe them.

Self Awareness
Understanding the job role and how it fits the individual worker.

Appreciation and Attitudes

Role of the supermarket manager and his/her responsibilities in both home and on the job to show how job responsibilities alter life roles.

Decision Making

Interview workers and find out why each chose their occupation in the supermarket.

Skill Awareness, Beginning Competency

Tools used, services provided (e.g. delicatessen), information needed.

Economic Awareness

Using the supermarket to purchase luxury vs. needed items; doing comparison shopping via the newspaper; wise buying and knowing correct change; using coupons and refunds.

Employability Skills

All students work together to set up mock grocery store in the classroom to emphasize cooperation and group goals. This store could have items which the students can actually "purchase" with money they earn while being paid for services rendered "in-class" and for being "on-the-job" as a student while in school during regular school hours.

Educational Awareness

Make a trip to the supermarket to purchase items for a class project. See if students recognize high school students bagging or checking. Compare their level of learning to the store manager's.

LEVEL: FIFTH GRADE UNIT: SHELTERS SUBJECT: SOCIAL STUDIES

Career Awareness

Careers change as shelters improved - careers involved in the building of a home may depend upon the area in which the house was built and the geographic location of that home. List job titles, e.g. bricklayer, carpenter, mason, electrician.

Self Awareness

Recognition of responsibilities of students in the maintenance of their homes or school building or apartment, based on things they are interested in doing or learning to do.

Appreciation and Attitudes

Advantages and disadvantages of various kinds of homes; advantages and disadvantages of geographic locations; the role of the builder and contractor and disadvantages and advantages of being the person in charge of a construction job.

Decision Making

Planning a new home by drawing up the floor plans, selecting the site, the size and number of rooms, the location of rooms within the home.

Economic Awareness

Determine the availability of materials and the cost of building in geographical areas (supply/demand).

Skill Awareness, Beginning Competency

Make models of planned homes in the classrooms, using selected tools, making measurements, and assigning specific job roles dependent upon expressed interest. This could be a pre-Christmas project.

Employability Skills

Relate "mass production" of homes to the making of prefab homes on the market and identify various job skills which were used in the classroom that would be necessary for working on construction of prefab homes. Identify the necessity of cooperation of land management, the buyer, the decorator, and the builder.

Educational Awareness

Point out the use of math in floor design and measurements, reading skills in ordering materials, increased vocational skills for specific occupational tasks. Have students take orders for the model homes to be produced. Write up bills of sale and special order tickets.

LEVEL: SIXTH GRADE UNIT: "HOW I ACT - EMOTIONS" SUBJECT: LANGUAGE ARTS

Career Awareness

Identifying careers and occupations within those career clusters dealing with psychology.

Self Awareness

Personal and emotional behaviors and mood awareness - discuss appropriate behaviors and emotional adjustments; learn to describe emotions in commonly used terms and relate them to personal experiences. It is important for students to understand why as well as how they behave.

Appreciation and Attitudes

Select occupations and identify importance of appropriateness of emotions and of moods and explain relationship to careers (e.g. certain occupations require more emotional control than others, such as waiting on people, hostessing, nursing, etc.).

Decision Making

Match an emotion or a mood which is appropriate to given situations and explain why others would not be appropriate. Impress the fact that a person can choose which behavior pattern he/she will use and that this decision has consequences.

Economic Awareness

Compare the cost of psychological treatment to medical costs. Compare group care to therapy costs.

Skill Awareness, Beginning Competence

Tools used by psychologists, tests (data) used by psychologists, interpersonal skills.

Educational Awareness

Relationship of learning and motivation to emotional control, appropriate behaviors, and "moodiness", male/female differences.

Employability Skills

Study of examples of neurotic and psychotic behaviors, with application to appropriate school personnel who fit into various categories.

LEVEL: SEVENTH GRADE UNIT: TRANSPORTATION SUBJECT: SOCIAL STUDIES

Career Awareness

Identify various occupational choices by cluster within the field of transportation, their changing role due to technological advancements, and discuss values and abilities required for each cluster.

Self Awareness

Identify one's own values and compare them to those required for the occupational choices from the career awareness portion.

Appreciation and Attitudes

Trace the historical developments in the field of transportation and relate them to United States History. After identifying the tasks which accompany each occupational choice, discuss the need for those tasks in light of the historical background.

Decision Making

Identify occupations which require long-range planning and those which are short-range within the field of transportation. Discuss why some people choose whichever of the two they do. Discuss how geographical location affects careers in the field of transportation and how some people must change their jobs due to geography and technical advancements.

Economic Awareness

The development of features for safety measures in transportation and economic aspects of maintenance of those necessary features. Discuss how businesses need to make profits in order to pay for some of these items.

Skill Development, Beginning Competence

Identify beginning competence skills within specific occupations in the transportation area and determine how many of those skills the student possesses at this time.

Employability Awareness

Personal characteristics and employability skills which will aid in locating employment may depend upon the geographical location. For example, some workers would prefer not to drive on ice and snow.

Educational Awareness

Compare the training received by an airline flight attendant with that of the pilot.

LEVEL: EIGHTH GRADE UNIT: SEWING SUBJECT: HOME ECONOMICS

Career Awareness

Identify jobs related to the field of home economics - sewing. Include marketing, sales and distribution of sewing machines and sewing materials.

Self Awareness

Explore own sewing capabilities and relate this skill to possibilities of sewing for other.

Appreciation and Attitudes

Tour a manufacturing company where sewing is done on a mass production basis. See the various skills required in order to make one completed garment. Discuss the necessity of each job for the whole production process and the importance of the individual to the whole.

Decision Making

Interview employees in the factory and determine how they made their career choices.

Economic Awareness

Sew own items; compare the cost of sewing to purchasing "ready-to-wear" counting in time required to sew the item, also. Determine outside costs which make the price difference. Produce items to sell as a class project and determine how much to sell the items for.

Skill Awareness, Beginning Competence

Mastery of sewing machine operations skills, measurement skills, and pattern instruction reading skills.

Employability Skills

Personality characteristics and career choice of those in home economics. Why do some people become sewing machine operators and some sales persons? Relate this to the job clustering of data, people, things.

Educational Awareness

Relate purchasing or sewing clothing to skills needed in mathematics, language arts, and knowledge of fabric.

LEVEL: NINTH GRADE UNIT: DRAMA SUBJECT: ENGLISH

Career Awareness

Occupational choices for drama field - include author, actor, director, stunt person, lighting director. - roles involved in the production of a play.

Self Awareness

The role in the production of a play as compared to career choice for the future - handicapping limitations which may or may not exist in the chosen field.

Appreciation and Attitudes

The importance of each person in the production of a play and how cooperation must exist for success to occur.

Decision Making

What to include in the play; who will do the acting; who the audience will be; what is required by each job role and who will fulfill that role the best.

Economic Awareness

Rates to charge for theatre tickets as related to the expense of production. If "employees" are to be paid, how much will the profits need to be in order to operate "in the black?"

Skill Awareness/Beginning Competence

By tryouts, determine if one's skill is working with data, people or with things, and what position one will have in the theatre production.

Employability Skills

Produce a play about the employability skills needed for getting a job.

Educational Awareness

Compare the educational skills needed by a producer (author, stage crew member, etc.) to the educational skills the individual possesses. Outline the steps to take to develop areas which are determined to be inadequate.

LEVEL: TENTH GRADE UNIT: DRAFTING SUBJECT: INDUSTRIAL ARTS

Career Awareness

Occupational awareness and information of careers available within the field of drafting. Historical comparison of the field of drafting to the development of arts and sciences.

Self Awareness

Evaluate individual drafting skills in light of those required in the field and determine adequacy of those skills. Determine the extent to which the handicapping condition will influence job choice and plan ways in which the disability may be compensated for.

Appreciation and Attitudes

Identify the effects of architectural drafting in society, arts, and humanities. Relate this to increased interest in building structures and in historical restoration of city landmarks.

Decision Making
Read blue prints to determine the materials, amount of materials, primary design, and tools necessary for the construction of a building either on the school campus or in some other public place. Decide where to purchase materials, how materials may be ordered, and the feasibility of using specific materials depending upon supply/demand in the geographical location.

LEVEL: ELEVENTH GRADE UNIT: SOLAR HEATING SUBJECT: SCIENCE

Career Awareness
Identify the skills and techniques necessary for various occupations connected with building a solar-heated home and/or working with solar energy. Trace the historic development of solar heating and the career or job titles of those who have been involved in the process.

Self Awareness
Assign tasks and duties to appropriate persons with the necessary skills to build a solar-heating unit and discuss the identification of ones' skills and talents (or lack of skill and talent, as the case may be) in light of acceptance of limitations.

Appreciation and Attitudes
Recognize the scientific contributions of persons within the field of solar heating and trace the implications of impact of solar heating upon our technological society.

Decision Making
Identify within the scientific fields any career in which further study would be advisable or of interest. Explore the potential of that area in relation to future employment.

Economic Awareness
Determine the costs of solar heating and the geographical location in which solar heating is both feasible and financially reasonable. Determine advantages and disadvantages of job choice in this field and discuss the implications upon the student who decides to receive further education in this area or pursue occupational interests. Some things which may need to be discussed; relocation due to geographical location, need to pursue further educational knowledge; job availability.

Skill Awareness/Beginning Competence
After building a solar model replica, determine the skills necessary to build the actual model. Identify tools, materials and personal skills necessary.

Employability Skills
In order to be on the solar-heating construction team, the student must be interviewed, file an application, and be selected by a team of judges or by the "construction boss" (science/woodshop teacher).

Educational Awareness
After the interview and application are completed, and the replica model built, the student will be able to identify areas of weakness and concern, competent areas of skill, and areas needing development.

LEVEL: TWELFTH GRADE UNIT: BUSINESS MANAGEMENT SUBJECT: VOCATIONAL FARMING

Career Awareness
Interview a farming business manager from a large farm unit and one from a small farm (probably the owner) and compare the skills, needs, and educational background of each. Determine from here, where skills needed can be developed and what tasks are part of the occupational roles.

Self Awareness
Cooperative work program with farm units of both a large and a small farm to build self-confidence in handling the work load and problems which arise.

Appreciation and Attitudes
During the cooperative-work experience, keep a daily log of tasks involved, and talents and skills required.

Decision Making
Determine what further skills would be necessary to continue in this chosen occupation, how much it would cost to further education in this field, financial costs involved in establishing one's own farm, or in working as a business manager for another person.

Economic Awareness
Determine the financial involvements of managing a larger farm and that of running the smaller farm unit. Include initial investment costs; insurance costs, social security or other retirement benefits, machinery costs, safety features, etc. Also include an awareness of the decline of the American small farmer and discuss why this is happening.

Skill Awareness, Beginning Competence
Assess skills in light of proficiency examination executed by employer, instructor, and/or others who have been involved in the cooperative work experience.

Employability Skills
Plan three alternatives for employment upon graduation in cooperation with the guidance counselor, a teacher, or a business person from the community.

Educational Awareness
Determine necessary skills which are currently lacking and how to go about building the competency necessary. This should be a part of the cooperative-work plan and determined by the evaluation.

LEVEL: POST GRADUATE SUBJECT: FOOD SERVICES NUTRITION SUBJECT: HEALTH/HOME ECONOMICS

Career Awareness

Using career and guidance services, determine all career choices available in nutrition, food services.

Self Awareness

Interview with placement services, counselor from chosen academic/vocational field, and with the vocational placement office to determine the feasibility of occupational selection and the job possibilities in that field.

Appreciation and Attitudes

Interview others who are in this occupational field and determine their chosen life-styles. Find out their reasons for selection of this as an occupation. Apply their reasons to one's own reasons and determine how their attitudes resemble or conflict with your own.

Decision Making

Using guidance and counseling services, cooperative-work experience programming, or other planned work experiences, course outlines, class involvement and personal interest, assess the career selection which has been made.

Economic Awareness

Develop economic consumer skills using apartment living skills, self-development skills, and independent living appreciation. This would involve nutritional aspects of consumer skills as well as the independence building.

Skill Awareness/Beginning Competence

Periodic evaluation in the work experience, classroom, and on-the-job to determine areas of strength, weakness, and categories of job mobility as related to skill development within the career choice.

Employability Skills

Prior to work placement in a work-experience program, write applications, use want-ads, employment office services, private employment services and the interviewing process in order to be placed in that program.

Educational Awareness

Use academic knowledge for writing applications, for advancing consumer knowledge in independent living, and for locating a work-experience site.

DORMITORY GOAL:*	CCEM ELEMENT	TECHNIQUES OR SKILL
Group living skills	attitudes and appreciation	identify the importance of the individual in the total functioning of the unit; awareness and understanding of the requirements for people to get along with each other; rights and responsibilities of self within the group; recognition of the contribution of "community" members to individuals within the group.
Interpersonal relationships	attitudes and apprecation self awareness	awareness of role in group situation and how it affects the functioning of the whole; analyze one's own commitment to the whole; recognize rights and responsibilities of self within the living situation; identify the importance of "self" an individual and as a worthy member of a relationship; recognition of one's own limitations and capabilities in relating to others.
Budgeting: time and money	economic awareness	awareness of the exchange of goods and services; knowledge of our monetary system; what is needed and what is luxury within the living situation; living within an economic limitation; legal and financial considerations required for economic survival.
Comparative shopping	economic awareness	awareness of the economic system and the process of production and distribution of goods and services; economic responsibilities to career decisions and to home living situations.
Cooking	beginning competency	recognition of different tools needed for different cooking procedures; unique tools which increase sensory awareness; mastery of tools required for meal preparation; match individual abilities and interests with skill needed.
Cleaning	beginning competency	recognition of different tools needed for different cleaning operations; identify unique tools required for specific cleaning jobs; mastery of tools needed for general and specific cleaning procedures; identify daily cleaning procedures and other cleaning jobs which are not done on a weekly basis.

*Goals in this section on dormitory living were developed at MSSD, Dorm and Apartment Living Program, 1978.

DORMITORY GOAL:	CCEM ELEMENT	TECHNIQUES OR SKILL
Decorating	appreciation and awareness self awareness career awareness decision making economic awareness	analyze working role of decorator and determine advantage and disadvantages of that career role; understanding of one's own decorative interests and learning how to express those interests in the home; identification of the abilities required to have a career choice in the field of decorating; identify the difference between decorating needs, wants and economic income limitations, demonstrate decorating techniques on limited budget, analysis of problems of decorative selection and decision making.
Entertaining	self awareness decision making	self confidence; relate personal values and influence of others in selection of forms of entertainment; interests and abilities expressed in forms of entertainment; awareness of the result of personal decision making; identify the importance of the need for goals in life-style decisions and leisure time activities.
Leadership	decision making self awareness appreciation and attitudes	awareness of the cause and effect relationship in decision making and its impact upon those being led and those doing the leading; analysis of the problems involved in being the decision maker in a leadership role; identify personal strengths and weaknesses and ways in which these can be used in the leadership role; recognize and appreciate the need for leadership; become aware of the requirements for people to get along with each other, even as it involves leaders.
Independent living	decision making beginning competency	awareness of the cause and effect in making appropriate decisions while on one's own; analysis of problems to be solved in living on one's own; recognize and verbalize the importance of need for goals in life-style decisions application of decision making in selecting items for one's own home understanding and using tools within the home for being independent.

DORMITORY GOAL:	CCEM ELEMENT	TECHNIQUES OR SKILL
Budgeting (advanced)	economic awareness	living within a budget; recognition of financial limitations and acceptance of these limitations.
How to rent an apartment	economic awareness decision making	identifying financial limitations; recognition of financial considerations to personal living; selecting a place to live and accepting one's own decision.
How to buy a car, furniture	economic awareness decision making	same as above understanding the financial and legal obligations of economic responsibility; understanding flexibility in time, effort, money when needing to make decisions.
What is insurance; car, life	economic awareness	projecting economic implications of purchasing insurance to future life-style and financial obligations and responsibilities; understanding and applying knowledge of economic responsibility to purchasing proper amounts of insurance; relating financial and legal instruments that protect the person to specific personal matters.

Module 6: INFUSION

Trainer Goals: Convince participants that infusion offers more advantages than an add-on approach to career education.

Provide concrete examples of curriculum infusion using the 8 elements of the CCEM Model.

Learner Outcomes

1. Define infusion, and list 3 reasons why the infused approach is better from an implementation point of view than an add-on approach.

2. Distinguish between infused and add-on approaches.

NOTE: Trainer must plan an infused lesson in preparation for this module. Lesson may be demonstrated live or videotaped for playback within this module.

Materials/Resource	Concepts
T-6-1 "Objectives for Module 6" (book)	Infusion
T-6-2 "Infusion vs. Add-on" (book)	
T-6-3 "Infusion Example 1" (book)	
T-6-4 "Infusion Example 2" (book)	
T-6-5 "Comprehensive CE Curriculum" (book)	
T-6-6 "Infusion Spinner Board"	
HO-6-1 "Infusion Practice Sheet" (class)	
HO-6-2 "Research Findings on Infusion and Academic Achievement" (book)	

Videotape Recorder & Monitor (optional) - Note: Arrange for equipment for playback if a demonstration tape has been prepared.

PROCEDURES:

Time **Visuals** **Trainer Narrative**

0:00 T-6-1 A. Present the objectives for Module 6 using transparency T-6-1.

B. Lecturette on Infusion*

1. The trainer should introduce the presentation by asking for a show of hands from everyone who believes that school work and work in the real world are related. Some participants may be skeptical. CE can reveal to students the connection between school and work if their curriculum has objectives which are infused. The trainer should cite one or more examples of infusion which participants may have already mentioned in the sharing or processing during Modules 1-5. Point out:

   - o Infusion is one way of involving all teachers in career education. It is not the only way, but it is THE way advocated by the U.S. Office of Career Education director, Kenneth Hoyt.

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*Adapted from The 1979 Annual Career Education Handbook for Trainers, Carolyn Raymond (Editor), Palo Verde Associates, Tempe, AZ, 1978.

Time Visuals Trainer Narrative

- The presentation to follow will help clarify the definition; point out the advantages and offer some concrete examples of how the process of infusion can be applied to content objectives for hearing impaired students.

2. Present the following points using the indicated transparencies.

T-6-2

a. Infusion
   - Most controversial, least agreed upon idea in CE
   - CE woven into regular curriculum topic
   - CE still distinguishable
   - Allows daily exposure to CE and increased relevance to basic topics. Many educators already doing this.

b. Add-On
   - A separate course or unit on CE
   - In some cases "add-on" is appropriate; for example in industrial arts, the employability skills are taught with other elements of CE.
   - Easier
   - Necessitates "bumping" something else out of curriculum

Time	Visuals	Trainer Narrative
		c. Dr. Ken Hoyt, Director of U.S. Office of CE says: o Education is preparation for work o Career skills, knowledge and attitudes transmitted as part of regular educational process o Add-on costs more o Infusion motivates and enhances learning of basic content
	T-6-3	d. Infusion Example 1: Elementary age deaf students visit community helpers as part of their social studies curriculum. It will be easy for their teacher to infuse some self awareness (career education) by asking the students if they would like to wear a uniform to work, like a law enforcement officer (cop).
	T-6-4	e. Infusion Example 2: In math class, deaf eighth graders could choose in which bank to deposit their savings based on the best interest rates. That teacher is infusing economic awareness, decision-making and beginning competency (working with data), at the exploration stage.

Time	Visuals	Trainer Narrative
	T-6-5	f. Comprehensive CE Curriculum o Review current curriculum for CE activities o Match these to the elements of the CCEM o Note elements which have no infused activities o Write CCEM objectives and activities to fill in the gaps o Commercially available CE materials may not meet your needs o Cost of infusion: CCEM objective writing requires some skill development o Cost of add-on: Adding-on to student schedules and school budgets o The reward for infusion is worth the effort
0:10		C. More Applications
	HO-6-1	1. Hand out HO-6-1 "Infusion Practice Sheet" for individualized practice. To check their skill development in the application of the infusion process, participants should do HO-6-1 which has an answer key at the end. Allow 15 minutes. 2. Direct participants to save their questions for Module 14B.

Time	Visuals	Trainer Narrative
0:25	Infusion Spinner Board (T-6-6)	D. Infusion Practice Activity

1. Participants should sit in the large group and construct an infused career education activity together, using the Infusion Spinner Board (T-6-6).
2. Trainer should spin for an element, for a stage and for a subject.
3. Trainer will construct the practice strategy using appropriate suggestions from the participants and the outline below:

    Objective:

    Activity:

NOTE: You may prefer to prepare an example in advance. If so, simply set the pointers on the element, stage, and content of the example.

Here is an example you may wish to use:

Spinner results = Social studies, decision making, exploration.

Objective = Students in seventh grade will be able to compare the different geographical areas in the state of Pennsylvania.

Activity = Tell students to pretend they will have to move to a new hometown in Pennsylvania. They must

Time Visuals Trainer Narrative

select a town or city and describe why they chose it based on its climate and geography.

When finished, ask if there are any questions or further discussion on infusion.

0:30 4. Infusion Demonstration

a. The trainer should ask the participants to role play the part of a class of students for the demonstration lesson. Present the brief sample lesson with discussion questions to illustrate a traditional academic objective. Then present a second set of questions, but infuse one or more of the career education elements.

Alternative. The trainer may wish to prepare a demonstration videotape or bring in students to give a live demonstration of the two sample lessons. The media set-up should be pre-arranged with the site coordinator.

b. Processing

Ask participants the following questions:

In which lesson was the academic objective achieved? (Both)

Which lesson illustrated relevance to future utility of the academic knowledge? (Second, i.e. infused lesson)

Time Visuals Trainer Narrative

c. Participants may not feel competent to create their own infused lessons at this point. The objective for the module was to be able to distinguish between add-on and infused lessons. Later in the parallel "B" modules, they will apply their learning here.

HO-6-2 E. Research.

Point out HO-6-2, in the participant notebook, which summarizes the research support for infusion.

0:45 F. Adjourn.

INFUSION PRACTICE SHEET*

SUBJECT:	English
CAREER EDUCATION GOAL:	Attitudes and Appreciation, Exploration Stage The student will appreciate life-styles and success associated with a career.
CAREER EDUCATION OBJECTIVE:	The student will identify an example of a career which characterizes a given life-style such as single swinger.

ADD-ON ACTIVITIES: Students will:

- describe two features for the life-style.
- interview workers about their life-styles and then compare them with respect to a list of factors.
- think up examples which illustrate certain life-style factors.

INFUSED ACTIVITIES: Students will:

- write a brief essay on the life-style of a character in a short story.
- given a list of various life-style factors, select those that fit a major character in a novel.
- write a short story or one-act play involving a given life-style.
- read a biography of an American whose life illustrates the given life-style.

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*This activity was adapted from The 1978 Annual Career Education Handbook for Trainers, Carolyn Raymond (Editor), Palo Verde Associates, Tempe, AZ, 1978, pp. 143-148.

Trainer's Manual: Career Education and Planning Skills. MSSD/NTID National Project on Career Education, 1980.

"WHICH ACTIVITIES ARE REALLY INFUSED?"

The following are examples of learning activities related to career education student objectives within given subject areas. The subject matter objective has not been identified since it would be a clue that the activity is infused. Read each activity, and decide whether or not it is really infused within the subject matter content or concepts. Then place a checkmark ( ) on the line following the "yes" or the "no" which follows each activity.

Item 1

Subject Area: American History (Junior High School)

Career Education Goal: Attitudes and Appreciations (Life-styles)-Exploration Stage

Career Education Objective: The student will identify the factors which characterize the given life-style.

Activity: The students compare the differing life-styles of two colonial American settlements by listing the various life-style factors for each group.

Is this activity infused? Yes ____ No ____

Item 2

Subject Area: Mathematics (Elementary)

Career Education Goal: Career Awareness/Self Awareness - Awareness Stage

Career Education Objective: Given the job title and description of a math related occupation, the student will identify characteristics that are a personal strength or a weakness for that occupation.

Activity: The student describes his/her own physical strengths and weaknesses.

Is this activity infused? Yes ____ No ____

Item 3

Subject Area: Social Studies (Junior High School)

Career Education Goal: Decision Making-Exploration Stage

Career Education Objective: Given (a) the description of a problem situation, (b) a number of ways in which the problem can be solved, and (c) a basis for evaluating whether or not the problem has been solved, the student will select one solution that best solves the problem.

Activity: The student discusses various proposed legislation (e.g. gas tax) in terms of appropriateness for the solution of a specific national energy problem. A local legislator who supports the bill is brought in to discuss it.

Is this activity infused? Yes ____ No ____

Item 4

Subject Area: Art (Elementary)

Career Education Goal: Attitudes and Appreciations (The Value of Work)- Awareness Stage

Career Education Objective: Given a work site, the student will identify an appropriate reward that is associated with working at that site.

Activity: The student lists enjoyable things that famous artists do on their jobs.

Is this activity infused? Yes ____ No ____

Item 5

Subject Area: Reading (Elementary)

Career Education Goal: Attitudes and Appreciations (The Discipline of Work) and Self Awareness - Awareness Stage

Career Education Objective: The student will list three examples of the application of responsibility to a situation.

Activity: The class reads a book about a famous person's application of responsibility to a job situation. The student describes how those same responsibilities are important in the chores he or she must do at home or school.

Is this activity infused? Yes ____ No ____

Item 6

Subject Area: Spontaneous Speech (High School)

Career Education Goal: Attitudes and Appreciations (The Discipline of Work) and Economic Awareness - Preparation Stage

Career Education Objective: Given the description of a worker right, the student will describe the application of the worker responsibility that accompanies that right.

Activity: The class will have an open discussion on the recent teacher strike, Each student will be asked to contribute a comment about how the teachers did (or did not) show good responsibility. Comments must be communicated clearly so that members of the class understand the speaker.

Is this activity infused? Yes ____ No ____

Item 7

Subject Area: Library Skills (Junior High School)

Career Education Goal: Career Awareness (Variety of Occupations)- Exploration Stage

Career Education Objective: Given a list of occupations that are related in a certain way, the student will name the way in which the occupations are related.

Activity: The student will examine a list and description of several occupations to see what they have in common with each other.

Is this activity infused? Yes ____ No ____

Item 8

Subject Area: Construction (Junior High School)

Career Education Goal: Career Awareness and Beginning Competency (Things) - Exploration Stage

Career Education Objective: Given a list in random order of job titles in industry that are sequentially dependent, the student will place the jobs in the proper order.

Activity: On a construction site the student samples the sequence of jobs involved in building a house and later lists from memory the occupational titles of the workers on each job in sequence.

Is this activity infused? Yes ____ No ____

Item 9

Subject Area: Art (Elementary)

Career Education Goal: Attitudes and Appreciations (Interpersonal Skills) - Awareness Stage

Career Education Objective: Given descriptions of personal interaction, the student will identify the examples of positive and negative behaviors illustrated.

Activity: After hearing a story about a group of children that had trouble working together in building a tree house, the student draws pictures of the ways in which the children cooperated with each other.

Is this activity infused? Yes ____ No ____

Answer Key: (For those add-on activities, think how they could be changed to become infused)

1. Yes, the historical facts describing two settlements, like Jamestown and Plymouth will be incorporated into the students' responses on lifestyle.

2. No, although self awareness is accomplished, there are no math skills learned during the activity.

3. Yes, the legislative process will be learned at the same time as decision making skills are being practiced.

4. Yes, the skills needed to produce art will be reviewed while the positive and negative factors of doing such work are discussed. Students will also learn the names of famous artists.

5. Yes, the students' reading skills are applied and discussion moves to concrete examples in everyday life which can be easily related to work.

6. Yes, selection of a controvertial or current topic to practice speech skills was combined with two CE components, attitudes and appreciation and economic awareness.

7. No, although career awareness was achieved, there were no library skills learned.

8. Yes, the building skills are practiced by sampling the jobs, while the job titles take on added relevance because the student has actually performed the work.

9. Yes, art skills are applied to the CE topic of interpersonal skills.

A SUMMARY OF RESEARCH FINDINGS ON INFUSION OF CAREER EDUCATION AND ACADEMIC ACHIEVEMENT

At the Commissioner's National Conference on Career Education in Houston, Texas (November, 1976), a panel of key people in career education dealt with the issue of effects of career education programs on the academic achievement of students. This panel consisted of Dr. Elvis Arterbury of Texas, R. Frank Rapley of Kentucky, Dr. Phil Spieth of Florida, Dr. Richard Ruff of Arizona, Dr. Sidney C. High, Jr., of the USOE Office of Career Education, and was chaired by Dr. Lois-ellin Datta of the National Institute of Education.

Dr. Arterbury described two studies of reading and mathematics achievement of fifth grade students whose teachers had and had not participated in career education staff development sessions. As measured by the Comprehensive Test of Basic Skills (CTBS), the career education group showed greater gains in both reading and mathematics achievement.

Dr. Rapley described evidence of the effectiveness of the career education program in Jefferson County, Kentucky. Preprogram assessment showed a lack of basic skills resulting in a deficit by grade eight of more than 2 1/2 years below grade placement when compared with national norms. Limited knowledge about the world of work, availability of occupations, lack of career planning, with as many as 71% of the eighth graders expecting to drop out were other reported concerns. Rapley found that the program, successfully implemented in the first year, resulted in reading and math achievement

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Trainer's Manual: Career Education and Planning Skills. MSSD/NTID National Project on Career Education, 1980.

at all grades showing a post-test score higher or as high as those of the total school population. For example, the mean grade in reading at the end of the seventh grade was 7.8 for the career education students (N=123) in comparison with 5.6 for the total population of seventh graders (N=250).

Dr. Spieth compared the basic skills of students who had participated in career education in the Dade County Florida schools with students in the same schools who had not participated. Program enrollees who were initially below national averages on the Fadale's Test of Career Awareness and Work Attitudes, surpassed the national average at the end of the second year. Basic skills comparison with students who did not have career education showed a trend favoring the career education students. This was especially noticeable in the schools which had a career-related basic skills lab. For example, students in career exploration at the junior high schools, surpassed the other schools in reading, math and occupational information, even though the schools were in low-income areas which were expected to compare unfavorably.

Dr. Ruff described the results of four years of career education controlled evaluations in rural and urban areas of Arizona. Greater knowledge of the range of available occupations, awareness of the educational requirements for various careers, understanding of specific skills and abilities required for those careers, understanding of specific skills and abilities required for those careers, and a sense of what is needed for success in business and industry was found in students who had a high exposure to career education in grades 3 to 12.

Dr. High analyzed a total of 38 studies which addressed basic skills achievement and career education. Of those 38, he reported that 19 are statistically strong in their support for the infusion of career education into the educational program and the claim that it increases academic achievement of participating students. Sixteen were declared "moderately supportive" and the remaining three indicated negligible or minimal impact.*

In May of 1977, a publication (The Efficacy of Career Education: An Up-Date) which dealt with the relationship of basic academic achievement of students and career education was issued by the USOE Office of Career Education, also authored by Dr. High as an update to the studies described above.**

In her publication (What Does Career Education Do For Kids? A Synthesis of 1975-76 Evaluation Results), Deborah Bonnet examined 45 final reports from career education projects. She concludes that career education programs do generally achieve progress towards some of the student outcome objectives. "Good evidence of success has been demonstrated in strengthening youngsters' desire to work . . . Career decision-making skills were strengthened with great consistency . . . Career awareness was achieved in the overwhelming majority of cases and there is reason to believe that the intent of the goal is being met on a broad scale."***

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* Datta, Lois-ellin: "Career Education: What Proof Do We have That It Works?" Report of Panel Session at the Commissioner's National Conference on Career Education (Houston, Texas. November 8, 1976). ERIC Document CE-014-833.

** High, Sidney C. Jr.: "The Efficacy of Career Education: An Update", Office of Career Education, US Office of Education, Washington, DC, May, 1977.

*** Bonnett, Deborah G.: "What Does Career Education Do For Kids? A Synthesis of 1975-76 Evaluation Results". Crawfordsville, Indiana: New Educational Directions, Inc., June, 1977.

Module 7: COMMUNITY INVOLVEMENT

Trainer Goal: Expand participants' conception of the other environments, besides the school, where career education experiences may be structured into a comprehensive program.

Learner Outcomes

1. Describe several places outside of the regular classroom situation in which career education concepts or activities could be integrated.
2. Distinguish between the processes of collaboration and cooperation of school and community.
3. Identify community sites for a potential field trip.

Materials/Resources

T-7-1 "Objectives for Module 7" (book)
T-7-2 "Infusion vs. Integration" (book)
T-7-3 "Cooperation vs. Collaboration" (book)
T-8-2 "Roadmap of Workshop Modules"
HO-7-1 "Field Trip Worksheet" (class)
HO-7-2 "Guidelines for Planning a Field Trip" (book)
HO-8-1 "Career Education Needs Assessment" (class)

Concepts

Integration
Collaboration

PROCEDURES:

Time	Visuals	Trainer Narrative
0:00	T-7-1	A. Show objectives for Module 7 using transparency T-7-1.

B. Lecturette: Integration

1. The lecturette should be preceeded with an example which contrasts infusion and integration. Then cover the following points using transparency

T-7-2 T-7-2 "Infusion vs Integration."

- o Recall the advantage of infusion which assumes that all classroom teachers can weave some of the career education elements into the content they teach.
- o The same benefits may be derived by threading the career education concepts into experiences which students have in the home and community, for example on field trips.
- o This integration process follows the same design as infusion for the weaving of career education into subjects. The trainer should cite examples which may have been mentioned during sharing or processing in Module 1-6.
- o To identify where the career education concepts may be most appropriately applied, community representatives and parents should be involved.

Time	Visuals	Trainer Narrative
	T-7-3	C. Lecturette: Collaboration
		1. Use T-7-3 to contrast collaboration and cooperation giving an example. Then cover the points below: o Involving outside agents on a community advisory committee in the decision making for career education programming is called collaboration. This is distinct from the school's traditional stance of asking for cooperation after they have already made the decisions. o Collaboration provides for two-way communication when an advisory committee is established early in the planning.
0:10		D. Designing a Field Trip
		1. In the large group, discuss ideas for possible field trips which participants may have taken.
	HO-7-1	2. Hand out "Field Trip Worksheet", HO-7-1.
0:15		3. Direct participants to work as teams on HO-7-1, reading directions themselves. Allow 15 minutes.
		4. Ask teams to share one example with the group.
	HO-7-2	5. Refer them to HO-7-2 "Guidelines for Planning a Field Trip". Indicate that these are good planning forms for planning field trips.

Time	Visuals	Trainer Narrative
0:40		E. Bridge Between Career Education and Planing
	T-8-2	1. Show transparency T-8-2 which is a roadmap of workshop modules. In preparation for the planning modules it will be necessary to complete individually a needs assessment questionnaire.
		2. Tell participants that before deciding what they want, it is necessary to document what they already have. The needs assessment will help identify the relative strengths and weaknesses in their program.
	HO-8-1	3. Hand out HO-8-1 "Career Education Needs Assessment." Direct participants to complete individually all the items in Part I before Module 8. They will work with their team on Part II in Module 8.
0:45		F. Adjourn

FIELD TRIP WORKSHEET

Directions:

1. Work with your team of career education facilitators to complete the chart below. List two potential sites for a field trip.

2. For each site listed, note the following field trip criteria:

   a. If deaf workers can be observed, place a "D" after site.

   b. If students can walk to site, place a "W" after it.

   c. If the site will provide a special tour, place a "T".

   d. If the site will allow picture taking of the work, place a "P" after it.

   e. If the site will permit students to question the workers or some of the workers, place a "Q".

   f. Check each of the CCEM elements which would be well represented at each site.

   g. Decide with your team if there are any other factors to consider in choosing your site. If so, label the sites appropriately.

LOCAL SITE	Self Aware.	Econ. Aware.	Car. Aware.	Educ. Aware	Beg. Comp.	Empl. Skills	Decis. Mkg.	Att./ Apprec.
Example: Post Office-D,W,P		x	x		x			
1.								
2.								

GUIDELINES FOR PLANNING A FIELD TRIP*

A. Preparation

1. Establish general objectives, for curriculum content and for one or more career education element.

2. Identify specific objectives.

3. Review the field yourself and collaborate with the field representative before making your choice and taking your class.

4. In class introduce students to the place they will be going, the people they will meet, the experiences they will have.

   Use maps, pictures, special speakers, any resources available to acquaint students with the planned excursion. Be careful, however, to leave some "surprises" for the actual experience.

5. Schedule several inquiry, or discussion, times when students can relate their own experiences and attempt to foresee the experiences they will have.

6. Develop appropriate vocabulary with concrete visualization of new terms for the fullest possible understanding of the experience. Research any unfamiliar signs and allows students to practice their use.

7. Execute bulletin boards, collect materials, involve students in arranging exhibits to stimulate interest in the trip.

8. Plan the mechanics of the trip:

   a. Attend to the administrative details.
   b. Set bus schedule with definite departure and arrival times.
   c. Secure the necessary permission slips from parents.
   d. Enlist the help of adults (parents, and maybe the bus driver)
   e. Specify lunch plans and clothing requirements.
   f. Discuss manners and bus behavior.
   g. Learn some songs or poems that fit the nature of the experience.
   h. Arrange for an interpreter, if necessary.
   i. Contact appropriate people if you wish the trip covered by the news media.

*Adapted from Central Susquehana Intermediate Unit Career Education Workshop Kathleen Gearhart, Trainer, 1979.

Trainer's Manual: Career Education and Planning Skills, MSSD/NTID National Project on Career Education, 1980.

9. Organize the class into "touring groups" with an adult leader for each group. Each group should take slide or Polariod photographs of those things which interest them most. Each group should also use a cassette recorders if allowed.

B. Follow-Up After a Field Trip:

1. Discussions and Inquiry groups

    a. What did you like best? How did you feel about being there?
    b. What surprised you?
    c. What was different than you expected?
    d. What was exactly as you expected it to be?
    e. What if you'd gone at another time of day? of the year?
    f. Whose job did you find most interesting?
    g. Would you like to work in such a place? Which job?
    h. What tools did the workers use?
    i. What skills did the workers need to perform their work?
    j. What suggestions do you have for helping others to enjoy the place?
    k. Retell the events in sequence.

2. Write letters of appreciation.

3. View pictures, study maps.

4. Share the trip with another class, via pictures, slide/tape production stories, etc.

5. Report to community news media.

LESSON PLAN FOR FIELD TRIP

School:

Grade: **Subject:**

Address:

Contact Person: **Telephone:**

Career Education Concepts:

Objectives:

Activity Description:

Pre-trip Preparation:

Post-trip Evaluation:

MODULE 8: SYSTEMATIC PLANNING AND IMPLEMENTATION

Trainer Goal: Provide an overview of planning and implementation.

Learner Outcomes

1. Express an appreciation for the concepts of a systematic approach.
2. Identify the steps involved in using the systematic planning and implementation processes.

Materials/Resources

T-8-1 "Shifting Subgroups"

T-8-2 "Roadmap of Workshop Content and Modules" (book)

T-8-3 "Objectives for Module 8" (book)

T-8-4 "Systematic Planning and Implementation" (book)

T-8-5 "Planning: Needs Assessment" (book)

HO-8-1 "Career Education Needs Assessment" (class)
(to be brought to Module 8 by individual participants after
completing Part I)

Concepts

Systematic Planning

Systematic Implementation

PROCEDURES:

Time Visuals Trainer Narrative

0:00 A. Icebreaker: "Shifting Subgroups"

1. Designate the four corners of the room as 1, 2, 3 and 4. Tell participants they will form shifting subgroups by moving to the corner identified with the appropriate or best answer to each of the following questions on planning. Each person must choose one response (forced choice).

T-8-1 2. Read the following items. Reveal each item in turn on transparency T-8-1.

a. Planning is:
    1. time consuming
    2. essential
    3. difficult
    4. fun

b. The best way to plan is:
    1. to work alone
    2. to involve others
    3. to let the principal do it
    4. step by step

c. The biggest advantage of planning is:
    1. being well organized
    2. being accountable
    3. seeing your progress
    4. knowing what you want

Time	Visuals	Trainer Narrative
		B. Transition between Career Education and Planning Modules
	T-8-2	1. The trainer should project T-8-2, explaining that the next four modules focus on planning.
		2. All members of the school team will experience the modules on planning skills and share in the development of goals. Although the entire team will be involved in the double module on implementation strategies, the administrators alone will experience the modules on implementation skills so that they will be able to manage the implementation efforts. At the same time, in parallel modules, the teachers and counselors will experience in-depth strategies on infusion of the elements of the CCEM model into classroom activities.
	T-8-3	3. Reveal the objectives for Module 8 using T-8-3.
0:05		C. Planning for Implementation
		1. Cover the following points as an overview of the symstematic processes which participants will use:
		o For career education infusion to happen within an institution, there must be careful planning for the changes resulting from the new program.

Time **Visuals** **Trainer Narrative**

- The way change is accomplished and the people who are involved in the implementation will impact on the success of the new program.
- A systematic approach to both planning and implementation will be more successful than an unsystematic approach.
- For our purposes, a systematic approach simply means a logical, step-by-step process.
- The involvement of a broad representation of people will help ensure the success of a new program in career education.
- Since a comprehensive plan for career education involves the entire school curriculum, K-12, the home, and the community, representatives of all three groups will need to be brought together to develop the long range goals for the program.

T-8-4

2. Use T-8-4 to show steps. Do not dwell on the steps since they are explained later.

   a. Planning involves the following five steps:

      1. assess needs
      2. analyze power and support
      3. set goal
      4. design evaluation
      5. overcome resistance

Time **Visuals** **Trainer Narrative**

b. Implementation involves the following steps:

1. state a specific goal
2. analyze all tasks
3. set up timelines
4. identify and locate resources
5. do evaluation

0:10 D. The Planning Process

1. Acknowledge that there are many ways to document plans. NPCE is using the model developed specifically for career education program planning in Roseville, Minnesota.

T-8-5 2. The following points should be covered using T-8-5:

- o The gap between reality and the ideal may be expressed as a need.
- o Before setting specific goals for a new program, the needs must be measured (assessed).
- o Key people will be needed to achieve the goal.
- o Realistic goals will be slightly less than ideal.
- o The planner must evaluate progress toward and achievement of each goal.

Time	Visuals	Trainer Narrative
		o Some people will resist change, but they must be overcome.
		3. As change agents, the planning team for career education will need each other's support and expertise.
0:15		E. Career Education Needs Assessment
	T-8-5	1. Tell participants that they will focus on the first step of planning which is needs assessment, transparency T-8-5.
	HO-8-1	2. Participants should take out the CE Needs Assessment, HO-8-1. Part I should already be completed.
		3. Direct participants to sit with their school teams and share their perceptions of greatest needs. Have them complete Part II of the Needs Assessment reaching consensus as a group.
		4. Announce that cofacilitators will be available to help them. Allow 20 minutes.
0:45		F. Adjourn

CAREER EDUCATION NEEDS ASSESSMENT

PART I

To the best of your ability and knowledge, report the extent (%) to which you feel each of the following objectives have been accomplished by your students. The ideal situation would be to have each outcome reported at 100%. If the item refers to outcomes for students with whom you don't work or about whom you have no knowledge, write NA on the line.

STUDENT OUTCOMES

Percent

Self Awareness

_______ 1. Students understand the importance of "self" as an individual and as a group member.

_______ 2. Students have positive self-images.

_______ 3. Middle/junior high school pupils in the school are engaged in some form of "hands-on" career exploration program, either within the school or in the broader community, designed to increase their knowledge of the world of their interests, aptitudes.

Economic Awareness

_______ 4. Middle/junior high school pupils in the school are engaged in some form of "hands-on" career exploration program, either within the school or in the broader community, designed to increase their knowledge of the world of paid employment, personal finance, economic principles.

_______ 5. Students are provided an opportunity to compare the current salaries of a variety of workers and relate their own life goals to the salaries needed to support the achievement of those goals.

Career Awareness

_______ 6. Students are aware of the broad range of occupations and people involved in them.

_______ 7. Students have access to career information, skill testing, and development of abilities.

_______ 8. Elementary school pupils in the school are engaged in career education activities designed to increase their general awareness of the world of paid employment, the place of work in society, and job titles.

Educational Awareness

_______ 9. Students view school work as an integral part of career development.

Trainer's Manual: Career Education and Planning Skills. MSSD/NTID National Project on Career Education, 1980.

______ 10. Students understand data and information related to educational requirements for career development.

Decision Making

______ 11. By graduation, students have acquired the basic skills necessary for choosing their career options.

______ 12. Senior high school students in the school have participated in a systematic career decision making process.

Beginning Competency

______ 13. Career exploration and self-assessment have been infused into the curriculum and into co-curricular activities.

______ 14. Students are able to identify and discuss their everyday activities in the orientations of data, people and things.

Employability Skills

______ 15. By graduation students have personal knowledge and skills for work placement.

______ 16. Senior high school students in the school have participated in a systematic work experience project for at least one full school year during the time they are in high school.

______ 17. Students possess interview skills, job search skills, positive work attitudes, human relations skills, and those skills necessary for completing a job application and successful interview.

Attitudes & Appreciation

______ 18. Middle/junior high school pupils in the school are engaged in some form of "hands-on" career exploration program, either within the school or in the broader community, designed to increase their knowledge of the world of work values associated with various aspects of that world.

______ 19. Students possess positive work attitudes and habits which are viewed positively in the work environment.

Stereotyping

______ 20. Students can identify negative stereotypes related to their sex, handicap or race.

COMMUNITY INVOLVEMENT OUTCOMES

______ 21. The school board has officially endorsed career education and declared it to be a priority of the school and/or school system.

______ 22. Resource persons form the business/labor/industry/professional/government community have participated in career education activities in the school and/or school system.

_____ 23. Parents of students in the school at the elementary school level, have participated in the planning or implementation of the career education program.

_____ 24. What percentage of parents are involved, within the home, in some kind of career education activity?

_____ 25. Learning experiences for students are provided outside the school.

_____ 26. A Career Education Advisory Committee involving representatives from the formal educational system, the home, and the business/labor/industry/professional/government community has been established and is in operation.

_____ 27. Collaborative participation of personnel from both the formal educational system and from the business/labor/industry/professional/government community has been established.

INFUSION OUTCOMES

_____ 28. Teachers have received at least four hours of inservice education designed to acquaint them with career education concepts and the basic methodology of infusing career education into their curriculum.

_____ 29. Career exploration and self-assessment have been infused into the curriculum and into co-curricular activities.

PLANNING AND IMPLEMENTATION OUTCOMES

_____ 30. A systematic evaluation of the effectiveness of career education in the school and/or school system has been carried out.

_____ 31. Clear and positive evidence of career education's effectiveness in the school and/or school system has been obtained.

_____ 32. Follow-up studies serve as an evaluation basis for services provided and curriculum modification.

_____ 33. Follow-up data with respect to both work and educational experiences have been collected and are available for at least what percentages of all students (excluding transfers who have left the school and/or school system during the past twelve months)?

_____ 34. A full-time coordinator of career education has been employed by the school and/or school system.

Identify and rate any other goals not included on this instrument.

_____ 35.

_____ 36.

_____ 37.

CAREER EDUCATION NEEDS ASSESSMENT

PART II

Please answer every item by circling the letter of the choice which best describes your opinion, based on the data collected in Part I. Select one answer for each statement. Your team should reach consensus.

1. Based on the results of items #1 through #20 on Career Education Needs Assessment Part I, the present school planning for our students' entry into the world of work is:

   A. Nonexistent
   B. Minimal
   C. Adequate
   D. Outstanding

2. Baesd on the results of items #21 through #27, present school planning for development of community and parent responsibility for career education is:

   A. Nonexistent
   B. Minimal
   C. Adequate
   D. Outstanding

3. Based on the results of items #28 through #34, present school planning for staff responsibility for career education is:

   A. Nonexistent
   B. Minimal
   C. Adequate
   D. Outstanding

4. Our career education team's present degree of competence for implementing career education may be described as:

   A. Very capable
   B. Capable
   C. Weak
   D. Unprepared

5. Where should career education receive the greatest emphasis:

   A. Elementary School
   B. Junior High School
   C. High School
   D. Kindergarten through High School

6. Where should career education receive the greatest emphasis:

   A. In the academic classroom
   B. In vocational subjects
   C. In a career education course
   D. In all classes through an integrated program

7. The first priority for implementing career education is to:

   A. Purchase commercially prepared materials
   B. Conduct teacher inservice training
   C. Provide time for teachers to produce materials
   D. Establish a career education center

Module 9: THE PLANNING PROCESS: NEEDS

Trainer Goal: Provide participants with a structured, systematic approach to planning a career education program and identifying their needs.

Learner Outcomes

1. Identify needs assessment as the first element involved in the systematic planning process.
2. Specify how a school team can operationalize a needs assessment.

Materials/Resources	Concepts
T-9-1 "Objectives for Module 9" (book)	Systematic Planning
HO-9-1 "Needs Focusing Worksheet"* (class)	Needs Asssessment

*Adapted from Booklet #7; "Planning and Management." Career Education Dissemination Project, Implementation Booklet Series. Roseville Area Schools, Roseville, Minnesota, 1977.

PROCEDURES:

Time	Visuals	Trainer Narrative
0:00	T-9-1	A. Present the objectives for Module 9 using transparency T-9-1.
	HO-9-1	B. Handout the "Needs Focusing Worksheet"*, HO-9-1, and direct school teams to narrow down the list of needs identified in the CE Needs Assessment (Part II, Handout HO-8-1) by using steps 1-4. Allow 30 minutes.
0:30		C. Processing Seated in school teams, share with the larger group by responding to the processing questions: 1. Which potential target population (students, community or staff?) has the most urgent career education needs? Share one of the needs identified. Did you realize these needs before you analyzed them here at the workshop? Do you think your principal is aware of these needs? 2. How will you resolve the differences in perception of the various needs? (Must keep communication lines open.)

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*Adapted from Booklet #7. "Planning and Management." Career Education Dissemination Project Implementation Booklet Series. Roseville Area Schools, Roseville, Minnesota, 1977.

Time Visuals Trainer Narrative

3. Now we must begin to focus on the ways to meet these needs. Why is it important to focus on high priority, easily accomplished needs? (The feelings of achievement will motivate people to do more. High priority accomplishments will do the most for your target population.)

0:45 D. Adjourn

NEEDS FOCUSING WORKSHEET*

You have rated the extent of specific career education needs in your program in Part I of the CE Needs Assessment (HO-8-1). You then summarized and rated general areas of need in Part II of that worksheet. The steps below will help you focus on the most appropriate needs to tackle first. Take into account your individual reflections and the group discussion generated by the last worksheet as your team reaches consensus on these steps.

Step 1. Write needs statements specific to your school for each category below. Your team should reach consensus.

Student Needs

1.

2.

Staff Needs

1.

2.

Community Needs

1.

2.

---

*Adapted from Booklet #7, "Planning and Management." Career Education Dissemination Project, Implementation Booklet Series. Roseville Area Schools, Roseville, Minnesota, 1977.

Trainer's Manual: Career Education and Planning Skills. MSSD/NTID National Project on Career Education, 1980.

Step 2. Focus now upon those needs. Arrange them from highest to lowest in importance. Your team should reach consensus.

Greatest importance 1. ________________
2. ________________
to 3. ________________
4. ________________
5. ________________
Least importance 6. ________________

Step 3. Next rank these needs again on the basis of probability of success. Be realistic! Your team should reach consensus.

Easiest to meet 1. ________________
2. ________________
to 3. ________________
4. ________________
5. ________________
Hardest to meet 6. ________________

Step 4. Now check ( ) the needs listed in step 3 above which are of personal interest to you as an individual. Then share your checked items with your team and discuss. Star (*) the needs which 3 or 4 people checked.

Step 5. In focusing for success you should now have identified the most important and the most easily solved needs which are relevant to the students, staff, community, you, and your team. List below any needs which meet most of these criteria.

NOTE: The needs identified above will be the most appropriate ones to use with the successive steps in the planning process in the next modules.

Module 10: THE PLANNING PROCESS: POWER AND SUPPORT*

Trainer Goal: Provide participants with an opportunity to analyze the roles of power and support played by significant individuals in the community.

Learner Outcomes

1. Identify the second step in systematic planning as the analysis of power and support.
2. Identify appropriate people as to function in a support group.
3. Describe how the analyses of power and support are applied to career education.

Materials/Resources	Concepts
T-10-1 "Objectives for Module 10" (book)	Power
T-10-2 "Planning: Power and Support"	Support System
T-10-3 "Sources of Power" (book)	
T-10-4 "Kinds of Support" (book)	
HO-1-1 "Power Focusing Worksheet" (class)	
HO-10-2 "Support System Worksheet" (class)	

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*Adapted from Booklet #7, "Planning and Management." Career Education Dissemination Project, Implementation Booklet Series. Roseville Area Schools, Roseville, Minnesota, 1977.

PROCEDURES:

Time	Visuals	Trainer Narrative
0:00	T-10-1	A. Present the objectives for Module 10 using transparency T-10-1.
		B. Power People
		1. Introduction
		o Acknowledge that there may be some frustration within the school teams when discussing power. Power situations are unique to each individual school. Participants should try to generalize after they have discussed their personal situation.
	T-10-2	o Show transparency T-10-2 to show where this step fits into the planning process.
		o After the needs assessment participants may feel ready to define a goal. However, it is necessary to identify power people and analyze support before a realistic goal can be set.
	T-10-3	2. Summarize the following points about power. Use transparency T-10-3.
		o Power is derived from three sources: position or authority, expertise, and social status.
		o Many school personnel derive their power from position. Other sources are equally

Time	Visuals	Trainer Narrative
		important. Other people in the home and community are equally important in planning (collaborating on) a career education program.
0:05	HO-10-1	3. Direct participants to sit with their school teams. Hand out the "Power Focusing Worksheet," HO-10-1, for each team to complete. Allow 15 minutes. If participants are not able to finish, remind them that they are learning a process here and may finish the product later on their own.
0:20		C. Lecturette on Support
		1. (Bridge) Power people may be a supporting or resisting influence.
	T-10-4	2. Show the transparency T-10-4 to present the following points about support: o A support system consists of a network of groups within the school-community setting that will promote career education. o Support systems include both formal and informal groups. Examples of formal groups are departments, advisory groups, businesses. Informal groups might include social groupings, families, and friends or other categories of people.

Time Visuals Trainer Narrative

- There are several ways people can provide support for a program change.
  - a. Communication - efficiently relaying information in any size school-community setting. May include the sharing of personal intentions and feelings. For example, secretary in the principal's office.
  - b. Problem solving - making judgments and decisions which represent group consensus. For example, community advisory committee.
  - c. Psychological - empathy, regard. For example, spouse or friends.
  - d. Action plans - taking on specific tasks, helping implement a program. For example, career education team, librarian, or principal.
- A change agent or small team of change agents can feel frustrated and lonely. Building a support system will make this job easier.
- Some supporters will have higher motivation if they know there will be pay-off (incentive). Incentives should have immediate

Time	Visuals	Trainer Narrative
		reward value, as well as professional motivation. (More pay for extra work, social recognition, new job title reflecting new work in career education, credit for workshop, involvement in decision-making.
0:25	HO-10-2	3. Hand out "Support System Worksheet" HO-10-2 and direct participants to complete the worksheet. Allow 15 minutes.
		4. Ask participants which kind of support was most plentiful. Least?
0:40	T-10-2	E. Summarize Step 2 in Systematic Planning using transparency T-10-2.
0:45		F. Adjourn

POWER FOCUSING WORKSHEET*

Directions: List the names of at least six key people in the school and community power structure. List only people who serve in roles which might be key in meeting the needs identified in step 5 of the Needs Focusing Worksheet (HO-9-1) from Module 9. Write down each person's role and consider their source of power. Place an X in the column(s) which identify their source(s) of power.

Position	=	power derived from superior authority or rank
Expertise	=	power derived from extensive knowledge or experience in career education
Social	=	power derived from high community status and acquaintences or relationships.

Key Power People	Role	Position	Expertise	Social
Chris Smith	Superintendent	X		
Dana Jones	PTA President			X
1.				
2.				
3.				
4.				
5.				
6.				

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*Adapted from Booklet #7, "Planning and Management." Career Education Dissemination Project, Implementation Booklet Series. Roseville Area Schools, Roseville, Minnesota, 1977.

Trainer's Manual: Career Education and Planning Skills. MSSD/NTID National Project on Career Education, 1980.

SUPPORT SYSTEM WORKSHEET*

Directions:
1. Identify each of the groups which support your career education program efforts. List only those groups which you know recognize the needs you identified in Module 9, HO-9-1.
2. Identify one or two key members and some ideas for motivating a higher level of participation.
3. Label each person as to function of the support they provide (communication, problem solving, psychological, action).
4. If there are any types of support not represented, add the names of people who could provide it

Formal Support Groups	**Key Members**	**Incentives**	**Type of Support**
1. ____________________	a. ______________	______________	__________
	b. ______________	______________	__________
2. ____________________	a. ______________	______________	__________
	b. ______________	______________	__________
Informal Support Groups			
1. ____________________	a. ______________	______________	__________
	b. ______________	______________	__________
2. ____________________	a. ______________	______________	__________
	b. ______________	______________	__________

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*Adapted from Booklet #7. "Planning and Management." Career Education Dissemination Project, Implementation Booklet Series. Roseville Area Schools, Roseville, Minnesota, 1977.

Trainer's Manual: Career Education and Planning Skills. MSSD/NTID National Project on Career Education, 1980.

Module 11: THE PLANNING PROCESS: GOAL SETTING, EVALUATION, AND OVERCOMING RESISTANCE TO CHANGE

Trainer Goal: Assist participants in defining a career education goal for their program within the context of the five steps of the systematic planning process.

Learner Outcomes

1. Describe the relationship between goal setting and evaluation.
2. Be aware of the use of incentives to minimize the effects of stressful change.
3. List in correct sequence the five elements involved in the systematic planning process.

Materials/Resources	Concepts
T-11-1 "Objectives for Module 11" (book)	Goal Setting
T-11-2 "Planning: Goal Setting/Evaluation"	Evaluation
T-11-3 "Goal Setting/Evaluation Lecturette" (book)	Incentives
T-11-4 "Systematic Planning"	
HO-11-1 "Goal Setting/Evaluation Worksheet" (class)	
HO-11-2 "Example Plan" (optional)	

PROCEDURES:

Time Visuals Trainer Narrative

0:00 A. "Career Education Utopia"

Ask participants to envision an ideal school and community where they could have anything they wanted for their career education program. Which goals would rank as a highest priority request? After a moment to think about it and to discuss it among themselves, each team should announce their ideal goal.

B. Trainer should explain that many of the ideals we envision are not achieveable without planning. It is important to focus energy and attention on achieveable goals.

T-11-1 Present the objective for Module 11 using transparency T-11-1.

C. Goal Setting/Evaluation Lecturette

1. The trainer should introduce the third step in the systematic planning process as Goal Setting and the fourth step as Evaluation. Use transparency T-11-2. T-11-2

T-11-3 2. Use transparency T-11-3 and cover the following points:

- The goal represents a realistic estimate of an ideal situation.

Time **Visuals** **Trainer Narrative**

- The realism is supplied by reference to the power and support analyses. Where power and support are strong, the goal should be achieveable.
- After a goal has been stated (documented), it may be necessary to review the processes used in step 2 (analysis of power and support) to be assured that the appropriate people for the specified goal have been identified.
- Data collection should be planned to identify and document your progress.
- This data collection process and the comparison between what you wanted and what you have achieved is evaluation.
- The evaluation techniques should also specify how you'll know when you have achieved your goal.

0:10 D. Goal Setting

1. Direct participants to work with their school team. Refer them to their "Needs Focusing Worksheet" completed in Module 9, HO-9-1. They will now identify at least one realistic goal for their school based on the needs they identified.

Time Visuals Trainer Narrative

HO-11-1

2. Hand out the "Goal Setting/Evaluation Worksheet", HO-11-1. Alert participants that they will work as a team on a pre-plan in Module 17, when they will articulate additional goals. This will be a practice session for goal writing. Allow 15 minutes.

HO-11-2 (optional)

3. Trainers should observe the school teamwork and respond to requests for help with the optional handout, HO-11-2, which offers an example plan.

0:25

4. Ask participants to share their goal statements. One representative from each school should stand and read their goal statement and evaluation plans.

0:35

E. Change

1. Cover the following points:

   - o If you do all the things you plan and these goals are achieved, there will be many changes.
   - o People who undergo change will experience stress.
   - o Incentives for change can reduce stress.
   - o Remember, to be effective, incentives must have immediate reward value and reflect professional motivation.
   - o Incentives must also be realistic in terms of available resources.

Time	Visuals	Trainer Narrative
0:40	T-11-4	F. Summarize the five elements in the systematic planning process using transparency T-11-4.
		G. Announce where participants should meet for parallel modules 12A-15A and 12B-15B.
0:45		H. Adjourn

GOAL SETTING/EVALUATION WORKSHEET*

Directions: With your team, document the steps below using the greatest need identified from step 5 of the Needs Focusing Worksheet (HO-9-1). If you have difficulty establishing goals for this need, ask a cofacilitator for assistance.

Need:

Power/Support:

Goal:

Evaluation:

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*Adapted from Booklet #7. "Planning and Management." Career Education Dissemination Project, Implementation Booklet Series. Roseville Area Schools, Roseville, Minnesota, 1977.

EXAMPLE PLAN

Need:

More coordination and communication between vocational education and academic department.

Power/Support:

Power: 1) Chair of Voc Ed Dept. 2) Chair of Academic Dept.

Support: 1) Voc teachers 2) Parents, Ms. Green and Mr. Black
3) Social studies teacher

Goal:

Design two units in social studies with infusion of the concepts related to employability skills, by Sept. 1st.

Evaluation:

(1) The social studies teacher will identify the vocational education objectives related to the social studies content and the career ed concept of employability skills.

(2) Students will demonstrate at least 75% comprehension of two social studies concepts they learned during vocational education class (employability skills).

Trainer's Manual: Career Education and Planning Skills. MSSD/NTID National Project on Career Education, 1980.

Roadmap of Content and Modules

I. These modules provide administrators, teachers and counselors with basic career education background. New concepts include stereotyping, infusion of the CCEM model and collaboration with community programs.

II. These modules provide administrators, teachers and counselors with basic planning background. Appreciation for a systematic approach and a common language for the planning process should result.

IIIA. Administrators will be exposed to the NPCE implementation process and learn how to lead a group to consensus.

IIIB. Teachers/Counselors will receive indepth practice in curriculum infusion of the elements of the CCEM.

IV. All team members will prepare an implementation plan for their most urgent goals.

I
Modules 1 - 7
Career Education

II
Modules 8 - 11
Planning

III
Modules 12 - 15
A Implementation
B Career Education

IV
Modules 16 - 18
Implementation

Module 12A: DECISION MAKING TECHNIQUES: AN OVERVIEW OF THREE PROCESSES*

Trainer Goal: Expose participants to several useful techniques for reaching consensus with a group.

Learner Outcomes (Administrators only)

1. Name and describe two out of three useful techniques for reaching decisions with a group.
2. Express appreciation for the benefits derived from decisions reached by group processes vs. the benefits derived from an individual judgment.
3. Identify the role of decision making in the systematic planning process.

Materials/Resources

T-12A-1 "Roadmap of Content and Modules (book)

T-12A-2 "Objectives for Module 12A" (book)

T-12A-3 "IGT"

T-12A-4 "NGT"

T-12A-5 "Delphi Technique"

T-12A-6 "Decision Making Techniques" (book)

HO-12A-1 "Nominal Group Technique vs. Interactive Group Technique" (book)

HO-12A-2 "The Delphi Technique" (book)

Concepts

Decision making

IGT

NGT

Delphi technique

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*Taken from Group Techniques for Program Planning by Andre Delber, Andrew Van de Ven and David Gustafson. Scott Foresman and Company, Glenview, Ill, 1975.

PROCEDURES:

Time Visuals Trainer Narrative

0:00 A. Trainer should provide the bridge into career education decision making by asking participants:

1. Have you used specific techniques for group decision making?
2. What are the problems that occur when group decision making is not used?
3. Why is group decision making better than individual decisions?

Possible answers would include the points:

- o Everyone feels they have contributed.
- o Quality decisions are reached.
- o People have the feeling of ownership and will work harder toward implementation.
- o Participants leave the meeting with feelings of satisfaction.
- o A consensus reaching process is preferable to a process that results in "winners" and "losers."

0:05 T-12A-1 T-12A-2 B. Present the workshop roadmap, (T-12A-1) and the objectives for Module 12 (T-12A-2). Explain that counselors and teachers are attending the parallel sessions. The administrators may wish to read the readings in the notebook for all the "B" modules.

Time **Visuals** **Trainer Narrative**

C. Lecturette on Techniques*

T-12A-3

1. Interactive Group Technique (IGT)

   a. The trainer should cover the following points using T-12A-3.

      - Open the IGT discussion by brainstorming possible alternatives or solutions to the question.
      - Accept all ideas and list them on the board as they are generated.
      - After people have run out of ideas, categorize the suggestions by grouping similar suggestions together.
      - Rewrite the list organized by category.
      - Ask the group to give pros and cons for each alternative.
      - Make a decision by voting for one idea. Alternative with the highest vote is selected.

   b. Trainer asks: Under what situations or conditions would this technique be useful? Name some groups where this technique could be appropriately used? (Allow time for a short discussion.)

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*Group Techniques for Program Planning by Andre Delber, Andrew Van de Ven and David Gustafson. Scott-Foresman & Co., Glenview, Ill, 1975.

Time Visuals Trainer Narrative

0:15 2. Nominal Group Technique (NGT)

T-12A-4 a. Cover the following points using T-12A-4.

- Open the NGT session by having individuals write out their alternative ideas. Request that they work silently and independently.
- Go around the table and get one idea from each person in turn (round robin) until all ideas are listed. A participant may pass. List each contribution on the board or on large newsprint. Do not allow discussion.
- After all ideas are listed, ask group to discuss each idea in order to clarify meaning of each.
- Each person selects the 3 most important or best ideas and writes each on a 3x5 card.
- These 3 ideas are then rank ordered and the cards are collected.
- The votes are recorded on the board or flip chart in front of the group.
- The group then discusses the voting. If desired, the items can be further

Time Visuals Trainer Narrative

clarified and a second vote taken to reach consensus.

- The item with the most votes is the group choice.

b. Trainer should ask participants where this technique could be appropriately used? (Allow time for a short discussion.)

0:25 3. Delphi Technique

T-12A-5 a. Cover the following points using T-12A-5.

- Typically accomplished by mailing out questionnaire. Delphi technique takes the most time to reach a decision.
- Respondents generate ideas in first mailing. These are categorized and the whole list is remailed.
- Respondents rate each of the ideas. The ratings are averaged for each item.
- Each respondent then receives the average rating and their own rating for each item. They are then asked to re-rate each item in light of the average rating.
- Final rating is used to rank order the ideas. Top rated ideas represent group choice. Participants should be mailed the results.

Time **Visuals** **Trainer Narrative**

b. Trainer should ask where this technique could be appropriately used?

0:35 D. Processing Questions

T-12A-6 Project T-12A-6 while asking these questions. It isn't necessary to repeat questions if they were covered in previous discussion.

1. Which technique(s) work best given limited time? (IGT, NGT - can be accomplished in one sitting)
2. What technique(s) would work well if you felt your group did not share equal knowledge of the subject? i.e. some individuals are not able to develop ideas immediately. (IGT - discussion could inform some participants initially)
3. What technique(s) would work well if you felt some participants might be hesitant in offering ideas? (NGT, Delphi - forced response or anonimity)
4. Which technique(s) would work least well with large groups? (IGT - most discussion)

HO-12A-1 E. Direct participants to read HO-12A-1 and HO-12A-2
HO-12A-2 (in their notebook) for more information about these processes.

0:45 F. Adjourn

NOMINAL GROUP TECHNIQUE* VS INTERACTIVE GROUP TECHNIQUE

NGT is a structured group meeting which proceeds along the following format. Imagine a meeting room in which seven to ten individuals are sitting around a table in full view of each other; however, at the beginning of the meeting they do not speak to each other. Instead, each individual is writing ideas on a pad of paper in front of him or her. At the end of five to ten minutes, a structured sharing of ideas taken place. Each individual, in round-robin fashion, presents one idea from his or her private list. A recorder writes that idea on a flip chart in full view of other members. There is still no discussion at this point of the meeting--only the recording of privately narrated ideas. Round-robin listing continues until all members indicate they have no further ideas to share.

The output of this nominal phase of the meeting is a list of propositional statements usually numbering eighteen to twenty-five. Discussion follows during the next phase of the meeting; however, it is structured so that each idea receives attention before independent voting. This is accomplished by asking for clarification, or stating support or nonsupport of each idea listed on the flip chart. Independent voting then takes place. Each member privately, in writing, selects priorities by rank-ordering (or rating). The group decision is the mathematically pooled outcome for the individual votes.

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*Adapted from Group Techniques for Program Planning by Andre Delber, Andrew Van de Ven and David Gustafson. Scott Foresman and Company, Glenview, Ill, 1975.

Trainer's Manual: Career Education and Planning Skills. MSSD/NTID National Project on Career Education, 1980.

To summarize, the process of decision making in NGT is as follows:

1) Silent generation of ideas in writing.
2) Round-robin feedback from group members to record each idea in a terse phrase on a flip chart.
3) Discussion of each recorded idea for clarification and evaluation.
4) Individual voting on priority ideas with the group decision being mathematically derived through rank-ordering or rating.

Objectives of the process can be stated as follows:

1) To assure different processes for each phase of creativity.
2) To balance participation among members.
3) To incorporate mathematical voting techniques in the aggregation of group judgment.

A brief word about each objective might be useful in this introductory description. It is possible to identify two unique phases of creative or judgmental problem solving: a fact-finding phase and an evaluation phase. The FACT-FINDING PHASE deals with problem search and the generation of data about the problem or, alternatively, about different proposed solutions. The EVALUATION PHASE is concerned with information synthesis, screening, and choosing among strategic elements of a problem or component elements of alternative solutions. There appears to be a consensus in research findings that these phases of problem solving are two distinct decision-making activities and require different roles and processes (Bales and Strodtbeck, 1969; Simon and Newell, 1958). In fact, to avoid group ambiguity about differences in decision-making phases, Maier and Hoffman (1964) suggest that one type of group process should be used to generate information and another type used to reach a solution.

The program administrator or planner should be concerned about which group decision-making process is appropriate in each phase of problem solving. For example, while a number of small-group theorists and practitioners question the viability of group interaction (IGT) for the problem-identification or fact-finding phase, this does not imply that interaction is not appropriate for clarification and evaluation. Indeed, research by Vroom and his associates (1969) suggests that discussion is useful for evaluating, screening, and synthesizing phases of problem solving. A major advantage of NGT and the Delphi Technique is that both involve different group processes for the phases of independent idea generation, structured feedback, and independent mathematical judgment (Gustafson, Shukla, Delbecq, and Walster, 1973).

A second advantage of the NGT format is the increased attention to each idea and increased opportunity for each individual to assure that his or her ideas are part of the group's frame of reference. The nominal (silent and independent) generation of ideas, the round-robin listing and serial discussion, and the independent voting all increase individual participation. By contrast, the conventional interacting group discussion (IGT) generally succumbs to the influence of a few individuals due to status, personality, and other forces.

Finally, the voting procedure in both techniques (IGT and NGT) incorporate insights from mathematics and management science. Studies in these traditions have shown that the addition of simple mathematical voting procedures can greatly reduce errors in aggregating individual judgments into group decisions (Huber and Delbecq, 1972).

THE DELPHI TECHNIQUE*

Unlike the typical interacting meeting (IGT) or Nominal Group Technique (NGT), where close physical proximity of group members is required for decision making, the Delphi Technique does not require that participants meet face to face. The Delphi Technique is a method for the systematic solicitation and collation of judgments on a particular topic through a set of carefully designed sequential questionnaires interspersed with summarized information and feedback of opinions derived from earlier responses.

To conduct the Delphi process, Turoff (1970) suggests at least three separate groups of individuals that perform three different roles:

> Decision maker(s). The individual or individuals expecting some sort of product from the exercise which is used for their purposes.
>
> A staff group. The group which designs the initial questionnaire, summarizes the returns, and redesigns the follow-up questionnaires.
>
> A respondent group. The group whose judgments are being sought and who are asked to respond to the questionnaires.

The Delphi process was developed by Dalkey and his associates at the Rand Corporation. It has gained considerable recognition and is used in planning settings to achieve a number of objectives:

1) To determine or develop a range of possible program alternatives.

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*Taken from Group Techniques for Program Planning by Andre Delber, Andrew Van de Van and David Gustafson. Scott Foresman and Co., Glenview, Ill., 1975.

2) To explore or expose underlying assumptions or information leading to different judgments.

3) To seek out information which may generate a consensus on the part of the respondent group.

4) To correlate informed judgments on a topic spanning a wide range of disciplines.

5) To educate the respondent group as to the diverse and inter-related aspects of the topic.

Although there appears to be agreement among practitioners on the above description of Delphi objectives, considerable variance is possible in Delphi formats relative to design and implementation. In particular, variations among practitioners in the administration of the Delphi Technique revolve around the following issues:

1) Whether the respondent group is anonymous.

2) Whether open-ended or structured questions are used to obtain information from the respondent group.

3) How many iterations of questionnaires and feedback reports are needed.

4) What decision rules are used to aggregate judgments of the respondent group.

The specific form of a Delphi is generally determined by the nature of the problem being investigated and constrained by the amount of human and physical resources available.

The basic approach used to conduct a Delphi can be exemplified, however, by a simplified Delphi situation wherein only two iterations of questionnaires and feedback are used. First, the staff team in collaboration with decision makers develops an initial questionnaire and distributes it by mail to the respondent group. The respondents independently generate their ideas in answer to the first questionnaire and return it. The staff team then summarizes the responses to the first questionnaire and develops a feedback report along with the second set of questionnaires for the respondent group. Having received the feedback report, the respondents independently evaluate earlier responses. Respondents are asked to vote independently on priority ideas included in the second questionnaire and mail their responses back to the staff team. The staff team then develops a final summary and feedback report to the respondent group and decision makers.

Of course, the program manager's or planner's choice of a decision-making process will reflect real-world constraints, such as the number of working hours required for group decision making, the cost of utilizing committees, and the proximity of group participants. The Delphi process requires the least amount of time for participants. However, the calendar time required to obtain judgments from respondents may take significantly longer than NGT meetings. In addition, the staff time and cost to design and monitor the Delphi process may be more than the time and cost required to conduct an NGT or interacting meeting.

Physical proximity may also be a real world constraint affecting the practitioner's choice of a decision-making process. The Delphi Technique does not require participants to meet face to face, while NGT and interacting processes require physical proximity. However, if disagreements or conflicting perspectives need to be resolved, the practioner may question the viability of the Delphi Technique, which uses a simple pooling of individual judgments without verbal clarification or discussion to resolve the differences.

In summary, concomitant with the advantages of a particular method for group decision making, there is also a need to know the cost associated with each process. In the final analysis, a comparative evaluation of the benefits and costs of NGT and the Delphi Technique may force the administrator to adopt a less than optimal technique for a given decision-making situation.

Module 13A: Applying the NGT

Trainer Goal: Provide an experience in using the NGT as a technique for group decision making.

Learner Outcomes (Administrators only)

1. List the steps in using the NGT.
2. Identify three characteristics of a healthy organization.

Materials/Resources	Concepts
T-13A-1 "Objectives for Module 13A" (book)	Organizational Health
T-12A-4 "NGT" (book)	NGT Technique
HO-13A-1 "Characteristics of a Healthy Problem-Solving Organization"* (class)	
Scrap paper	
Newsprint & markers	
3x5 cards (50)	
cofacilitators	

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* Booklet #1 - "Consultation Skills and Shared Decision Making" Career Education Dissemination Project, Implementation Booklet Series. Roseville Area Schools, Roseville, Minnesota, 1977.

PROCEDURES:

Time	Visuals	Trainer Narrative
0:00	T-13A-1	A. Present the objectives for module 13A using transparency T-13A-1. Cover these points: o An organization may "suffer" or be unhealthy because of a breakdown in a variety of areas. o Participants will use a nominal group technique (NGT) to answer the question, "Which characteristics are most important for an institution or organization to be healthy?"
	T-12A-4	Refer to T-12A-4 in the participants' notebook.
		B. NGT
	Scrap paper	1. On scrap paper, each participant should list all the characteristics they can think of for a healthy problem-solving organization. Some possible ideas include high morale or good communication. Allow 4 minutes.
	Note: If there are more than 12 participants, break into 2 NGT groups. Newsprint & Markers	2. Trainer should ask for one idea from each participant, going around the table. Co-facilitator should list all items generated on newsprint. Report round-robin until all ideas are listed. With 8-10 participants, a list of about 15-20 items will be generated. Do not allow discussion or justification at this time.

Time	Visuals	Trainer Narrative
0:15		3. Clarify the meaning of each idea. If they overlap, cluster the items by categories if possible. Combine those which are exactly the same. Number each resulting idea on the newsprint.
0:20		4. Hand out 3x5 cards, 3 to each participant. Direct participants to select the 3 most important characteristics from the list. Write the first 3 words of the item and its number, one to a card, putting the number of the item in the upper left corner. (The words serve as a double check for illegible numbers).
		5. Rank order the 3 items. Write a "3" in the lower right corner of card for the most important item. Underline the 3. Select the least important of the 2 remaining items and put a "1" in lower right corner of that card. Underline the 1. Place a 2 in lower right corner of the remaining card.
0:25		6. Collect the 3 cards from each participant, shuffle them (to preserve anonimity) and record the vote for each item by listing each rank order. Set up a chart like this and tally the points for each item:

Time Visuals Trainer Narrative

1. 2, 1, 1, 1
2.
3. 3
4. 3, 2
5.
6.
7. 2
8. 1
9. 2
10. 2
11. 3, 3
12.
13.
14. 3, 3, 1
15. 1, 2

0:30 7. Participants may now discuss the voting pattern, defend their vote and/or persuade others to change their vote. The trainer should call attention to the low vote items, and the highest rated items, to see why participants did or did not select them.

8. (Optional) If time permits, vote again for the top 3 items using only those items which were selected by 1 or more people in the first vote.

9. Circle the top 3 items based on total vote.

0:35 C. Processing

Ask participants the following questions:

1. What were the major differences of opinion expressed by the group?
2. What new information or perspectives did you learn as a result of the group process?
3. What role does conflict or difference of opinion play in the group decision-making process? (We need to show that differences or conflicts are healthy for broadening our options).

Time Visuals Trainer Narrative

4. Where in the planning process would you need group decision making? (Forms a bridge between power/support groups and the goal setting steps.)

5. List several groups with which you currently work, where you could apply this decision-making technique. (department meetings, curriculum committee meetings, advisory groups).

6. In the NGT process, did you feel your opinion was taken into consideration by the group?

7. Were you satisfied with the priority voting which resulted?

8. What helped to increase your satisfaction? (Note to trainer, the points below should come up in the discussion of this question, but may need to be pointed out.)
   - Conflict was resolved by voting mechanism.
   - Everyone had freedom to participate, contribute items equally.
   - Everyone had an equal vote which helped in the resolution of status inequalities (based on sex, race, job title, or hearing impairment)

HO-13A-1 D. Hand out list of "Characteristics of a Healthy Organization," HO-13A-1. Point out that these aren't "correct"

Time	Visuals	Trainer Narrative
		answers, but merely a list derived by another group of administrators for comparison with their own.
0:45		E. Adjourn

CHARACTERISTICS OF A HEALTHY PROBLEM-SOLVING ORGANIZATION*

1. Open communication of ideas, feelings, and intentions across staff and up and down line hierarchies, i.e., messages are sent and received between superintendent, principal, and teachers in equal balance.
2. New ideas from inside and outside the organization are incorporated.
3. Cooperation is valued over competition.
4. A high level of trust is present.
5. Risk-taking is encouraged.
6. Decisions are made with tentativeness or a provisional try attitude.
7. A feeling of cohesion or belonging is balanced with an appreciation of differences.
8. People who are affected by decisions have the opportunity to participate in the decision-making process.
9. Delegation of tasks is such that a large number of person find themselves assigned to tasks of high responsibility.
10. Decisions are made with the necessary commitment and clarity for implementation.

* Booklet #1 - "Consultation Skills and Shared Decision-Making" Career Education Dissemination Project, Implementation Booklet Series. Roseville Area Schools, Roseville, Minnesota, 1977.

Module 14A: ORGANIZING FOR COMMUNITY PARTICIPATION

Trainer Goal: Help participants identify their community collaborators and task force leaders.

Learner Outcomes (Administrators only)

1. Define collaboration and contrast with cooperation with respect to one-way vs. two-way communication.
2. Identify the populations to be represented on a career education community advisory committee.
3. Contrast the function and member composition of an advisory committee and a task force.

Materials/Resources

T-14A-1 "Design 1"

T-14A-2 "Design 2"

T-14A-3 "Objectives for Module 14A" (book)

T-14A-4 "Cooperation vs. Collaboration" (book)

T-14A-5 "Differences Between a Task Force and an Advisory Committee" (book)

HO-14A-1 "Sample Materials for a Community CE Advisory Committee" (book)

Newsprint & Markers

Blank Paper

Concepts

Collaboration

Cooperation

Communication

Community CE Advisory Committee

Task Force

PROCEDURES:

Time	Visuals	Trainer Narrative
0:00		A. Icebreaker "Two Way Communication"
	Blank paper	1. Hand out blank paper to each participant. Direct them to draw the design which will be described. Read the directions without miming the shapes. Don't allow participants to see the design or to ask questions. Tell participants you'll be describing a design made up of 3 rectangles which they can't see. They cannot ask any questions. They may jot down notes.
		2. Directions: (To be spoken and/or signed clearly and slowly, watching for non-verbal confirmation of appropriate reading speed.) The diagram has three rectangles, all the same size, in contact with each other. The rectangles have lengths about twice as long as their widths... they look very much like shoe boxes. Draw one rectangle so that the long sides are horizontal and the short sides are vertical. I will refer to this rectangle as your reference rectangle. (Pause) I want you to draw a second rectangle the same size but rotated 90 degrees. The rectangle should look like a door. The second rectangle should

Time Visuals Trainer Narrative

be up against the right side of the reference rectangle. (Pause)

Imagine the third rectangle sitting on top of the second rectangle, also looking like a door. But, the top rectangle is not straight. It looks like it is toppling over to the left. The lower left corner of rectangle 3 is touching the upper left corner of rectangle 2. The lower right corner of rectangle 3 is not touching the upper right corner of rectangle 2 because rectangle 3 has toppled 30 degrees to the left. (Pause)

T-14A-1 3. Project the transparency T-14A-1 and let each person compare his/her design to the original. Acknowledge the person with the closest matching design.

4. Describe a second design which appears on transparency T-14A-2. Explain that participants should interupt the reading to ask questions which the trainer will answer regarding the placement of lines, size, shapes, etc.

5. Directions: (Trainer should stop for questions as needed, answering in his/her own words.)

Now we are ready to draw three more rectangles touching each other. The first rectangle is

Time Visuals Trainer Narrative

like a door with its long sides vertical, short sides horizontal. (Pause)

Imagine the second rectangle also with its long sides vertical. The lower left corner of the second rectangle touches the upper right corner of the first rectangle. Now, tilt the second rectangle 45 degrees to the left. (Pause) The third rectangle is like a shoe box with its long sides horizontal and its short sides vertical. The lower left corner of the third rectangle is touching the lower right corner of the tilting second rectangle.

6. When participants and the trainer feel they have communicated all they need to know to copy the design, let each person compare their design to the original by projecting the transparency, T-14A-2.

T-14A-2

7. Processing Questions.
   a. Ask the participants to compare the accuracy of results with one way vs. two way communication (Generally individual's drawing are more accurate with two-way communication.)
   b. Ask participants with which method did they feel most involved? Most comfortable?

Time Visuals Trainer Narrative

(Generally the sender or trainer will express greater certainty/comfort with one-way communication while receivers or other participants will feel more frustrated and less certain with one-way communication.)

8. Bridge: To relate the previous activity to career education, consider the school as the initial sender, the community as the initial receiver and career education as the information to be communicated.

0:15 T-14A-3 B. Present the objectives for Module 14A using transparency T-14A-3.

C. Lecturette on Community Advisory Committee for Career Education

T-14A-4 Cover the following points using transparency T-14A-4:

- o Ask participants why it is important to involve the community in career education. Remind them of the discussion in Module 7 on integration.
- o Ask why a community advisory committee is an appropriate first step in involving the community.
- o When forming a community CE advisory committee, a variety of definitions for career education will exist in people's minds.
- o Asking for cooperation is like one-way communication with only the school functioning as the

Time Visuals Trainer Narrative

sender. The school develops the plan and then asks for community support and help in implementing the school plan.

- School and community need to collaborate and use two-way communication with school and community both functioning as senders and receivers of information.
- This will result in a better grasp of goals and strategies and commitment for support.

0:20 D. Sharing

1. Have participants share examples of community cooperation or collaboration efforts from their school. If they have had experience with a community advisory committee, have them describe the experience.

newsprint

2. Ask participants to name the members on a community advisory committee by role. List roles on newsprint. Ask the participants who should organize the committee; who calls the meetings. Experienced participants should be able to relate this to their own Community Advisory Committee. If time allows, trainers may share their experiences.
3. If most efforts have been cooperation, then the trainer should draw out ideas from the participants

Time Visuals Trainer Narrative

on how to use a more collaborative approach, i.e. involving the committee in long range planning.

0:35 E. Task Force

1. If participants note anyone on a planned Community Advisory Committee whose contribution would be highly focused, explain that they may be better used as the head of a task force, instead of serving as a committee member.

2. Compare the differences between an Advisory Committee

T-14A-5 and a Task Force, using transparency T-14A-5:

- Task force deals with specific problems or creates specific programs.
- Task force is created by the advisory committee.
- Longevity of task force is limited by short term assignment.
- Is your current team seen as a task force or as an advisory group? (i.e. temporary or long term)
- How far along in its planning should the school be before involving the community in its planning efforts?

Time	Visuals	Trainer Narrative
	HO-14A-1	3. Refer to the sample community advisory committee agenda and related handouts (HO-14A-1) in participants' notebooks. These could be used as prereading materials for a first committee meeting.
0:45		F. Adjourn

CAREER EDUCATION COMMUNITY ADVISORY COMMITTEE AGENDA (90 minutes)

(10 Minutes) I. Introduction of members

(10 minutes) II. Overview of the goals, objectives and activities of the career education program

(25 minutes) III. Career education in the ___________________ community (If available, a media presentation is most effective at this jucture; otherwise an overview can be given by one or more persons. Questions from the members should be encouraged.)

(15 minutes) IV. Refreshment break and informal conversation

(25 minutes) V. Suggested role or activities for the committee
- A. Creating task forces for specific programs
- B. Reviewing task force activities and direction
- C. Recommendations to task forces
- D. Evaluation and liaison with other groups

(5 minutes) VI. Setting time and agenda for next meeting
- A. Selecting a chairperson and secretary
- B. Creating task force selection process
- C. Reporting of minutes

Handouts:
Program Abstract
"Career Education: What's It All About?" Occupational Outlook Quarterly Vol. 21 (2) Summer, 1977, 1-7.

Trainer's Manual: Career Education and Planning Skills. MSSD/NTID National Project on Career Education, 1980.

Module 15A: IMPLEMENTING CAREER EDUCATION

Trainer Goal: Provide a systematic implementation process for use in participants' schools.

Learner Outcomes: (Administrators only)

1. List in order the steps involved in documenting the systematic implementation of career education (goal, task analysis, timelines, resources, goal evaluation).
2. Describe the milestones for implementation of a comprehensive plan for career education and the format for documentation. (Sequence of milestones = report to administration, present to community, conduct needs assessment, form community advisory committee, identify resources, schedule inservice training)

NOTE: Prior to the Module 15A, the model vehicle parts may be divided into packets, one for each participant in the group.

Materials/Resources

T-15A-1 "Objectives for Module 15A" (book)

T-15A-2 "Steps in Systematic Implementation (book)

HO-15A-1 "NPCE Implementation Form" (class)

M-15A-1 "Snap-together Model Vehicle"* (2)

2 Cofacilitators needed

Concepts

Systematic Implementation

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*The snap-together vehicles, which are not found in the kit, may be purchased at a local toy store or ordered from Ravell, Inc., Venice, California 90291. Cost approximately $1.98/model.

PROCEDURES:

Time Visuals Trainer Narrative

0:00 A. Icebreaker: "Model Building"

M-15A-1 1. Move participants to 2 small groups. For seven or fewer participants, use one group.

2. You will work with your small group to accomplish a goal by participating in an unstructured activity. The goal is to build a model vehicle without reference to the directions. Each participant will get a piece of the model. The pieces snap together.

3. Distribute the pieces so that each participant has one or more pieces. No one should have access to the picture of the vehicle on the box cover or to the directions. Announce, "Go!" Stop participants after one team correctly finishes, or after ten minutes.

0:10 B. Processing Questions

1. As a car producing company, what was your goal?

2. Did you have timelines?

3. Normally, directions (task analysis) facilitate implementation. How did you analyze the task?

4. How did you use the people in your group for a division of labor? Was there a skilled model builder? Was there someone with construction

Time **Visuals** **Trainer Narrative**

skill? Was someone good at spatial relations? A born leader?

5. Did you make the best use of resources for implementation? Were there forgotten parts?

6. How did you evaluate if you had done it correctly? (Sample answers may include: it works, it looks like the picture, from past experiences.)

7. What was the real purpose of the activity? (Working together to accomplish one goal, and to appreciate the value of a systematic approach to implementation)

C. Lecturette on Systematic Implementation Process

Relate each step of the process to the model construction, using transparency T-15A-2.

T-15A-2

1. Goal - Take top rated goal from the goal setting step in the planning process.

2. Task analysis - Document the action which will accomplish the goal.

3. Timelines - Schedule the deadlines for specific tasks.

4. Resources - Analyze internal and external resources needed and available, and assign responsibilities.

5. Evaluate progress - Check the achievement of milestones against the ideal (goal). Document

Time Visuals Trainer Narrative

what happened, which strategies were successful and how any problems were handled.

6. Ask participants: "In your home schools, how do you document planning and implementation?" Highlight the variety of answers.

0:20 D. NPCE Implementation Form

HO-15A-1

1. Hand out the "NPCE Implementation Form" HO-15A-1. Explain that NPCE is offering a uniform format to facilitate the coordination and communication of implementation.

2. Inform the administrators that they will each teach their teams how to use the format in Module 17. They may wish to use IGT or NGT to facilitate group decision-making during the planning.

NOTE: With more than 10 administrators break into 2 small groups.

3. As a group, begin with the first milestone on HO-15A-1. Suggest that IGT or NGT is a convenient process to reach consensus on the implementation plan. Either the trainer or a selected participant may lead the consensus process. Direct participants to complete the form through the description of the evaluation in order to practice what they will do with their teams in Module 17. Individuals should share experiences concerning what

Time	Visuals	Trainer Narrative
		has worked well and what has not worked for implementation of a new program. Allow 20 minutes.
T-15A-1		E. To review the learning process reveal the objectives for Module 15A. Remind participants that they will meet with the large group for the next module.
0:45		F. Adjourn

PROJECT:____________________ PROJECT LEADER:______________________

PROJECT TEAM:________________

GENERAL GOAL: Implementation of a Comprehension Career Ed Program

Milestones (Specific Goal Statements)

1. Report on the NPCE Workshop to local institution's administrators, faculty, and staff.
2. Formal recognition of team and role of each member.
3. Formal presentation to community, parents, industry, etc.
4. Conduct a CE Needs Assessment.
5. Form a Community CE Advisory Committee.
6. Resources.
    a. Identify resources.

       e.g.: staff - for training, for curriculum revisions, for teaching model class, for data collecting.

       e.g.: money - for workshops, for classroom materials.

       e.g.: time - for workshop, for curriculum work.

    b. Match resources to needs.

       e.g.: existing materials - where can they be infused, where are they already infused?
7. Inservice training.

Trainer's Manual: Career Education and Planning Skills, MSSD/NTID National Project on Career Education, 1980.

Milestone # 1 REPORT ON NPCE WORKSHOP

TASK/ACTIVITY	SCHEDULED COMPLETED DATE	RESOURCES (Equipment, services, personnel, travel, admin. support)

Milestone Evaluation

Module 12B: CCEM: SELF AND CAREER AWARENESS

Trainer Goal: Allow for development of self awareness and career awareness in participants, and demonstrate how these elements are infused.

Learner Outcomes (Teachers and counselors only)

1. Describe the internal and external forces that influence one's career.
2. Create an infused activity for self awareness and for career awareness.
3. Recognize the infusion of work habits activity as a vehicle for an icebreaker.
4. Recognize the infusion of the "A to Z Game" as a vehicle for a career awareness activity.
5. Be able to look up a job title in the D.O.T.

Materials/Resources

T-12B-1 "Roadmap of Content and Modules" (book)

T-12B-2 "Objectives for Module 12B" (book)

HO-12B-1 "Personal Inventory, Why Do You Work?" (class)

D.O.T. (to be furnished by the school library at the training site)

Blank transparencies

Markers

Concepts

Self Awareness

Career Awareness

PROCEDURES:

Time **Visuals** **Trainer Narrative**

0:00 A. Icebreaker: Work Habits GoRound

1. If there are more than 8 participants, break into 2 or more groups and sit in separate circles.

2. Have the first players give their first name and one work habit which he/she values or embodies. e.g. "Chris - punctual."

   Next player in a circle says the first person's name and work habit, then gives his/her own name and another, different work habit. Each successive player must list all preceding names and habits in order; then give his/her own until everyone has had a turn around the circle. (Players may list habits which are the opposite of ones already mentioned but they should not repeat the same habit.) If there are two or more groups, the last participant should introduce everyone and their work habit to the other group(s).

0:10 3. Move participants back to the large group. Ask them how they could infuse self awareness by teaching about work habits. In school, a tardy bell may ring for classes. At an awareness stage, the teacher may compare the bell to a factory whistle or a punch-in clock in a work setting.

Time **Visuals** **Trainer Narrative**

0:15 T-12B-1 T-12B-2 B. Re-orient participants to the workshop agenda using T-12B-1. Present the objectives for Module 12B using transparency T-12B-2. Participants should note that they will skip over the materials in their notebooks for administrator modules 12A-15A. However, these materials may be read by these participants if they are interested.

C. Self Awareness

HO-12B-1 1. Handout the "Personal Inventory: Why Do You Work?" HO-12B-1. Introduce this self awareness activity by covering the following points:

- o Many people, when asked: "Who are you?" will reply with the name of the work they do. We invest ourselves in our work. Remind participants of their responses in Module 2.
- o Sometimes the work we do isn't satisfying and doesn't enhance our self-concept. Instruct participants to fill out the inventory, working individually. Allow about 10 minutes.

0:30 2. Processing Questions

a. What are some things that make work satisfying?

b. What makes work dissatisfying?

Time Visuals Trainer Narrative

c. Name some forces which have influenced your choice of jobs.

d. Were any forces internal barriers?

3. How would you infuse this concept of satisfaction in one of the stages (not awareness)?

0:35 D. Career Awareness

1. Introduce the element by covering the following points:

   - In career development, self awareness is a basic starting point. Another awareness which students need to focus on early is career awareness. Children need to know that workers have job titles.
   - The D.O.T. is a reference book listing in alphabetical order more than 20,000 job titles.

2. A to Z Game

a Separate into subgroups of 5 people each.

4 blanks transparencies 4 markers

b. Direct participants to write the letters A-Z down the left margin of a blank transparency. Direct them not to begin until the signal. They will have two (2) minutes to fill in a job title for each letter. Titles must be real jobs, not inventions. Your answers

Time	Visuals	Trainer Narrative
	D.O.T.	will be checked in the D.O.T. for accuracy. Announce, "BEGIN", and time with a watch. Flash the lights to stop the writing after 2 minutes.
0:40		c. Note which team has the most job titles. Collect the transparencies and share with the large group. Opposing teams may challenge the titles and check them in the D.O.T. Assist participants who don't know how to use the reference. Save the lists for use in Module 13B.
		3. Ask participants how they would infuse this game for career awareness in a stage of career development other than awareness. (example: preparation stage = business class uses alphabetical job titles to practice filing.)
0:45		E. Adjourn

PERSONAL INVENTORY
WHY DO YOU WORK?*

1. In what jobs have you experienced satisfaction?

2. What made these jobs satisfying?

3. In what jobs have you experienced dissatisfaction?

4. What made these jobs dissatisfying?

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*Adapted from 1978 Annual Career Education Handbook for Trainers. Carolyn Raymond, editor. Palo Verde Associates, Tempe, AZ, 1978.

Trainer's Manual: Career Education and Planning Skills. MSSD/NTID National Project on Career Education, 1980.

Module 13B: CCEM: EDUCATIONAL AND ECONOMIC AWARENESS

Trainer Goals: Help participants develop a sense for comparing educational requirements for a variety of occupations.

Provide practice infusing the concepts of educational awareness and economic awareness.

Learner Outcomes (Teachers and counselors only)

1. Recognize infused activities for educational awareness and economic awareness.
2. Describe an infusion classroom activity for educational awareness and for economic awareness.

Note: A-Z lists of job titles generated in Module 12B will be needed in this module.

Materials/Resources

T-6-6 "Infusion Spinner Board"

T-13B-1 "Objectives for Module 13B" (book)

T-13B-2 "Unusual Occupational Titles"

HO-13B-1 "Educational Awareness Worksheet" (class)

HO-13B-2 "The Lemonade Game" (class)

HO-13B-3 "Example Game" (class)

Transparencies with A-Z lists of job titles

Sheets of newsprint

Markers

Concepts

Educational Awareness

Economic Awareness

PROCEDURES:

Time Visuals Trainer Narrative

0:00 T-13B-1 A. Present the objectives for Module 13B using transparency T-13B-1.

B. Educational Awareness

1. Show the A-Z transparency of "Unusual Occupational
T-13B-2 Titles," T-13B-2. Cover the following points:
   - o Educational awareness includes knowledge of school and other structured experiences related to career preparation.
   - o The level of education one achieves will impact on one's level of employment.

HO-13B-1 2. Direct participants to work in groups of three. Hand out the "Educational Awareness Worksheet," HO-13B-1. Participants will need to use the A-Z lists from Module 12B. Allow about 5 minutes.

0:10 3. Processing
   a. Ask participants to share which occupations were classified as high school, technical diploma, 4 yr. college, graduate degree, and post-graduate degree.

T-6-6 b. Describe how educational awareness can be infused into a classroom activity at a particular developmental stage. Use the Infusion Spinner Board, T-6-6, to select the stage.

Time	Visuals	Trainer Narrative
0:20		C. Economic Awareness
	HO-13B-2 newsprint	1. With participants working in the same groups of three, hand out the "Lemonade Game," (HO-13B-2) and a sheet of newsprint for each group.
		2. Tell participants they will have fifteen minutes to complete the directions for the game and to outline their game design. The newsprint may be used for a game board.
0:35		3. Processing
		a. Ask participants to share their ideas.
		b. Select one of the examples and describe how economic awareness was infused into the game. For which developmental stage was the activity designed?
		c. Be sure participants note that no job titles are used in this activity. Only when infusing the element of career awareness do job titles need to be mentioned.
	HO-13B-3	4. Hand out the example game, HO-13B-3.
0:45		D. Adjourn

EDUCATIONAL AWARENESS WORKSHEET

Directions: Choose five familiar job titles from the A-Z job list generated in Module 12B. List them below and circle the minimum educational level required to qualify for each job. The educational levels are: high school graduate, technical diploma (or certificate), 4-Yr. college, graduate degree, post-graduate degree. Sometimes experience is the only educational requirement, or may be required in addition to education. Estimate the number of years of experience required.

Job Title	Experience	Estimated Education
1. ____________________	____________	HS, TD, 4-Y, GD, PG
2. ____________________	____________	HS, TD, 4-Y, GD, PG
3. ____________________	____________	HS, TD, 4-Y, GD, PG
4. ____________________	____________	HS, TD, 4-Y, GD, PG
5. ____________________	____________	HS, TD, 4-Y, GD, PG

Trainer's Manual: Career Education and Planning Skills. MSSD/NTID National Project on Career Education, 1980.

ECONOMIC AWARENESS
THE LEMONADE GAME

Concepts (Social Studies)
Geography
Supply and Demand

Concepts (Math)
Unit price calculations
Basic functions calculations

Concepts (Business)
Profit and loss
Merchandising and sales

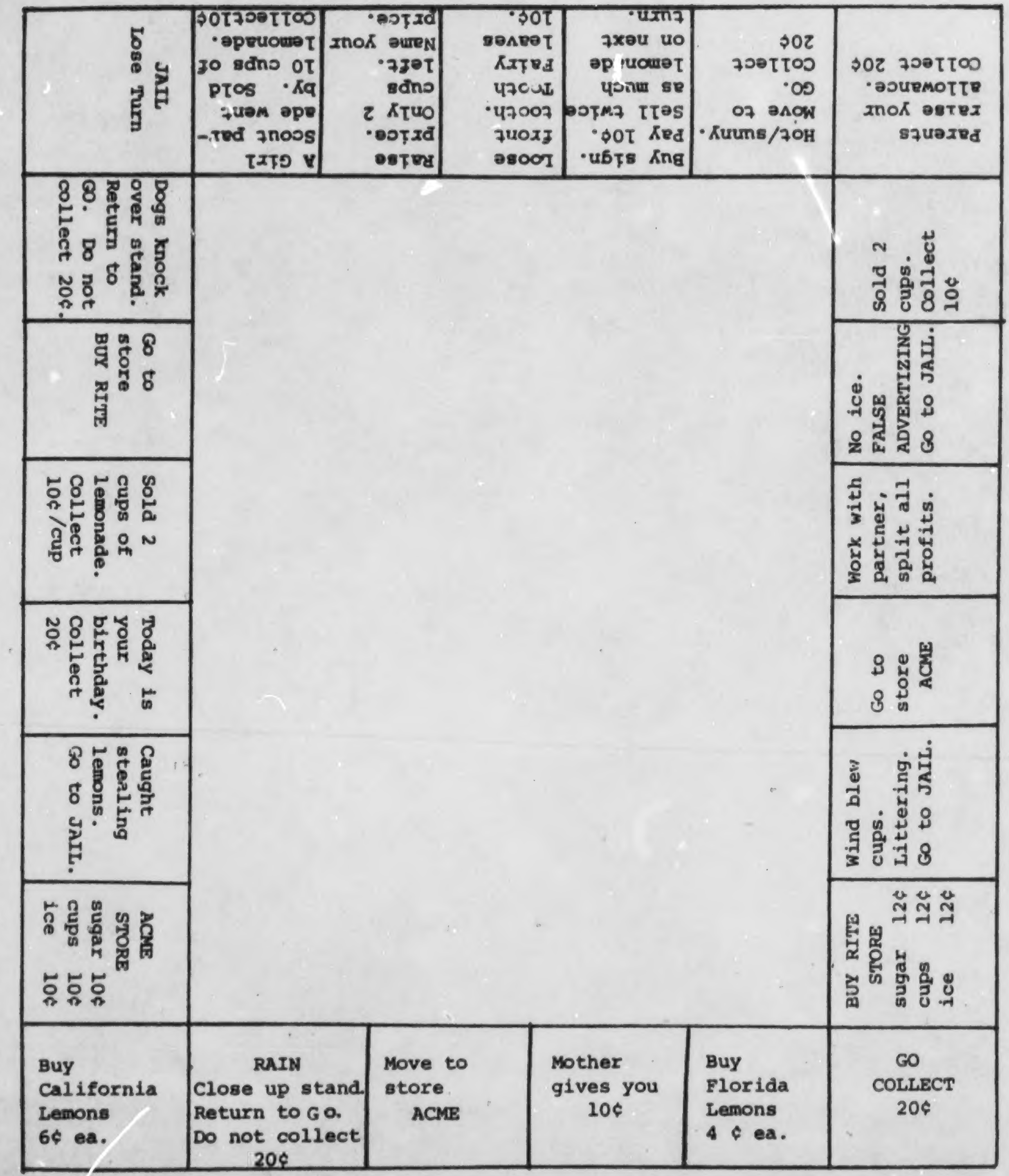
Concepts (Career Ed.)
Economic awareness

Directions: Select one content area (social studies, math or business) and use the specified concepts to construct a gaming activity to infuse the content with economic awareness. The game should relate to the sequential steps and hazards inherent in setting up a lemonade stand. List the roles of the game and design a game board or other necessary materials.

Materials

Chips (or pennies)
Dice
Game Board
Game Sheets or Cards
List any other materials needed

EXAMPLE: LEMONADE GAME



GO COLLECT 20¢

Buy Florida Lemons 4 ¢ ea.

Mother gives you 10¢

Move to store ACME

RAIN Close up stand. Return to Go. Do not collect 20¢

Buy California Lemons 6¢ ea.

ACME STORE sugar 10¢ cups 10¢ ice 10¢

Caught stealing lemons. Go to JAIL.

Today is your birthday. Collect 20¢

Sold 2 cups of lemonade. Collect 10¢/cup

Go to store BUY RITE

Dogs knock over stand. Return to GO. Do not collect 20¢.

JAIL Lose Turn

A Girl Scout parade went by. Sold 10 cups of lemonade. Collect10¢

Raise price. Only 2 cups left. Name your price.

Loose front tooth. Tooth Fairy Leaves 10¢.

Buy sign. Pay 10¢. Sell twice as much lemonade on next turn.

Hot/sunny. Move to GO. Collect 20¢

Parents raise your allowance. Collect 20¢

Sold 2 cups. Collect 10¢

No ice. FALSE ADVERTIZING Go to JAIL.

Work with partner, split all profits.

Go to store ACME

Wind blew cups. Littering. Go to JAIL.

BUY RITE STORE sugar 12¢ cups 12¢ ice 12¢

Trainer's Manual: Career Education and Planning Skills, MSSD/NTID National Project on Career Education, 1980.

Module 14B: CCEM: BEGINNING COMPETENCY

Trainer Goal: Acquaint participants with the work orientations of data, people, and things as they apply to beginning competency.

Learner Outcomes: (Teachers and counselors only)

1. Describe one everyday activity representative of each work orientation: data, people, and things.
2. Describe an infused classroom activity for beginning competency representing at least one orientation: data, people, or things.

Materials/Resources

T-14B-1 "DPT Shifting Fingers"

T-14B-2 "Objectives for Module 14B" (book)

T-14B-3 "Infused Activity 1"

T-14B-4 "Infused Activity 2"

T-14B-5 "Infused Activity 3"

T-6-6 "Infusion Spinner Board"

HO-14B-1 "Script for Work Functions in Everyday Life"* (book)

HO-14B-2 "Work Function Definitions"* (book)

HO-14B-3 "Example Lessons for Beginning Competency" (class)

M-14B-1 "Work Functions in Everyday Life" (Filmstrip/Tape Show)*

Filmstrip Projector

Tape recorder synchronized with filmstrip projector

Concepts

Beginning Competency

Data

People

Things

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*Handout and program based on the D.O.T. were adapted from materials developed by Harold L. Munson, University of Rochester, NY, CREED Project, 1975.

PROCEDURES:

Time Visuals Trainer Narrative

0:00 A. Icebreaker: "Shifting Fingers - DPT"

1. Before the session, label three corners of the room Data, People, Things.

2. Direct participants to point to the appropriate corner of the room as each job title is read. If the job involves mostly ideas, or numbers, point to the data corner; if the job involves working with other people, point to the people corner; if it involves things, point to the things corner.

T-14B-1 3. On the transparency T-14B-1, cover the job titles and reveal them one by one, pausing while the group points. In reality, most jobs involve more than one orientation. Allow participants to point, without giving justification. The trainers should not give correct answers. Then after all examples, ask if they had any questions on the job titles.

farmer
accountant
mechanic
cosmotologist
teacher of the deaf

Time Visuals Trainer Narrative

4. Review the answers, asking participants why they labeled the job as they did.

Accept all legitimate answers.

farmer = data (weather, prices)
things (machinery)
accountant = data (numbers)
mechanic = things (tools)
cosmotologist = people (customers)
things (tools, aids)
teacher = people (students)
data (ideas)

0:05 T-14B-2 B. Present the objectives for Module 14B using transparency T-14B-2. Explain that the use of the 3 work orientations is preferable to the use of clusters or job titles. Classification is based on tasks instead of job titles, which can become obsolete.

C. "Work Functions in Everyday Life".

1. Introduce the filmstrip by telling participants that their students are engagaed in activities related to data, people, and things every day in school, at home, or in their community. The filmstrip will give relevant examples of how work is already a part of student lives and how it may be related to the concept of beginning competency.

Time	Visuals	Trainer Narrative
	HO-14B-1 HO-14B-2	2. Point out that the narration script HO-14B-1, and work function definitions HO-14B-2 are in their notebooks.
	M-14B-1	3. Begin filmstrip presentation M-14B-1 (12 minutes).
0:30		D. Beginning Competency Infusion
		1. Divide participants into 3 small groups with 7 or fewer in each group. Assign categories as follows: Group 1 = Data, Group 2 = People, and Group 3 = Things
		2. Ask each group to develop an activity plan for their respective orientation. Each plan should have one or more activities specific to a content area and beginning competency, infusing the data or people or things concept.
	T-6-6	Trainer should spin the spinner on the Infusion Spinner Board to select content and stage. Take 10 minutes.
0:40		3. Report the activities from the small groups to the large group. Hand out "Example Lessons" HO-14B-3
	HO-14B-3	and show other examples of beginning competency as follows: (Use appropriate transparencies)
	T-14B-3	o Content area: Speech Objective: Spontaneous Communication

Time Visuals Trainer Narrative

Activity: Tell a joke.

Career Ed objective: Working with people. Being able to tell a joke effectively requires a student to have beginning competency in the speech area, and in working with people. This could be labeled with a job title, but more important is self-insight into working with people.

T-14B-4

- o Content area: Math

Objective: Learning concept of rank order

Activity: Using batting averages, rank order the Pittsburgh Pirates players.

Career Ed objective: Working with numbers (data). In order to rank numbers, a student must have the beginning competency in numerical concepts. The teacher could discuss various careers of people who work with numbers.

T-14B-5

- o Content area: Metals Shop

Objective: Manual Dexterity - Using a Wrench

Activity: Fix a bicycle handle bar.

Career Ed Objective: The job title could be that of mechanic, but it is more important to stress personal awareness of beginning skills in working with things.

Time **Visuals** **Trainer Narrative**

4. Remind participants of HO-6-1 "Infusion Practice Sheet." Direct them to re-read any items they had difficulty with when they completed it in Module 6. Answer any questions.

0:45 E. Adjourn

224

SCRIPT FOR "WORK FUNCTIONS AND EVERYDAY LIFE"*

Slide No.	Captions
1.	Our lives can be seen as a series of tasks, situations, and activities. Through these one achieves a feeling of being and a purpose for becoming.
2.	In traditional career education programs, the focus is on exposing students to as many jobs as the programs can accommodate.
3.	This traditional approach is complicated by the number and variety of jobs in existence. The Dictionary of Occupational Titles contains definitions for over 20,000 separate occupations.
4.	Relying on information about careers is further complicated when some jobs become obsolete, while new occupations are created every year.
5.	Instead of just learning about careers, learning about the tasks, situations, and activities encountered in working is an approach that makes career education a real "here and now" experience.
6.	Through discussion of the DATA, PEOPLE, THINGS orientation of their own daily lives, students should be better able to recognize these orientations as they apply to various job or work situations.
7.	By thinking about and assessing experiences which have been a part of their home, school or community life, young people are forming a base for their own career decision making.
8.	Helping students to identify and become involved with their own experiences early is a way of enhancing the continuous aspects of career development.
9.	Avocational involvement provides many opportunities to discover tasks in community service, social activities, and life situations, and to relate them to work functions in real and meaningful ways.
10.	Home chores and other work involvements can be significant in understanding the requirements of the "world of work."

*Adapted from materials developed by Harold L. Munson, University of Rochester, Rochester, NY 14627.

Trainer's Manual: Career Education and Planning Skills. MSSD/NTID National Project on Career Education, 1980.

Slide No. Captions

11. As students become older and eligible for employment, they have experiences for which they are paid. These are "real work" experiences.

12. However, think how many valuable experiences are lost when we depend only upon experiences that students are paid for.

13. A viable career education program must capture the essence of all the learnings which can and do occur in the home. . . .

14. the school . . .

15. and the community.

16. Exposure to activities associated with DATA, PEOPLE, and THINGS can help students to distinguish among various tasks involved in working and playing.

17. By using "infused" strategies in the classroom, students will grasp the concepts of work functions. They quickly learn to associate their own activities with those found in the working world.

18. Students are able to relate the work functions to activities of a similar nature in their own life. For example, a student who has a collection can describe how the items in it were gathered, classified or organized.

19. Students learn from each other! Their comprehension of work functions is expanded as they share the experiences of others.

20. A program of career education should help students to transfer learning from the classroom to the real world. For example, the math teacher can relate the computing, or DATA activities in a lesson to job requirements.

21. By relating school activities to the concepts of work functions, the students' understanding of "work" can be reinforced and expanded.

22. THINGS-oriented activities can be found in many academic or vocational education courses.

23. Classroom and school activities use and develop PEOPLE skills. Although fewer deaf workers may be currently employed in PEOPLE-oriented jobs, the opportunities for employment, and the possibilities for "tailoring" job activities should be explored.

Slide No.	Captions
24.	Like many other subject matter areas, students need a basic vocabulary. It takes time to deal with the "work functions" concepts and requires a willingness to accept gradual progress.
25.	Inviting a deaf worker to talk with a class about the work functions activities of his or her job provides an opportunity to relate work tasks to classroom studies. This role model could also talk about barriers that arise for deaf persons in the world of work.
26.	Students can plan field trips to local industries to observe workers engaged in specific work functions.
27.	With each new experience, whether it be in the home, or in the community, at school or at work, students are organizing information that they will draw upon when choices must be made. Knowing about work activities and understanding one's self in relation to them, can go a long way in making career decisions easier.
28.	This approach to career education is based on the Life Experiences Model developed by Dr. Harold L. Munson at the University of Rochester.

DATA-PEOPLE-THINGS: DEFINITIONS

I. WORKING WITH DATA (4th digit in D.O.T. code number)

Working with information in the form of ideas, concepts, or numbers.

Code	Function	Definition
0	Synthesizing	Bringing information together from a number of sources to form new ideas or to discover new facts.
1	Coordinating	Bringing information together to improve work communications or operations.
2	Analyzing	Examining and evaluating information.
3	Compiling	Gathering, organizing, or classifying information.
4	Computing	Using arithmetic operations in working with information.
5	Copying	Transcribing, entering, or posting information.
6	Comparing	Making judgments about the differences or similarities of information.

DATA-PEOPLE-THINGS: DEFINITIONS

II. WORKING WITH PEOPLE (5th digit in D.O.T. code number)

Working with human beings or with animals as if they were human.

Code	Function	Definition
0	Advising	Dealing with individuals in order to advise, counsel, or guide them (legal, scientific, clinical, spiritual, or other concerns).
1	Negotiating	Exchanging ideas, information, and opinions with others to formulate policies and programs; arriving jointly at decisions, conclusions, or solutions.
2	Instructing	Teaching or training others (including animals) through explanation, demonstration, or supervised practice.
3	Supervising	Determining or interpreting work procedures for a group of workers, assigning specific duties to them, maintaining harmonious relations among them, and promoting efficiency.
4	Amusing	Amusing or entertaining others.
5	Persuading	Influencing others in favor of a product, service, or point of view.
6	Speaking-Signaling	Talking with or signaling people to convey or exchange information.
7	Serving	Attending immediately to the needs, wishes, or requests of people (or pets).
8	Taking Instructions-Helping	Following directions, attending regularly to orders of a supervisor.

DATA-PEOPLE-THINGS: DEFINITIONS

III. WORKING WITH THINGS (6th digit in D.O.T. code number)

Working with objects, substances or materials; with machines, tools or equipment; with products.

Code	Function	Definition
0	Setting Up	Setting up or adjusting machines or equipment to restore, improve or change their performance.
1	Precision Working	Using your body or work aids to work, move, guide, or place objects or materials in situations where considerable judgments and very exact movements or actions are necessary.
2	Operating-Controlling	Controlling and adjusting the progress of machines or equipment designed to fabricate and/or process objects or materials.
3	Driving-Operating	Starting, stopping, and controlling the actions of machines or equipment for which a course must be steered, or which must be guided, in order to fabricate, process, and/or move things or people.
4	Manipulating	Using body members, tools, or special devices to work, move, guide, or place objects or materials.
5	Tending	Starting, stopping, and observing the functioning of machines or equipment.
6	Feeding-Offbearing	Inserting, throwing, dumping, or placing materials in or removing them from machines or equipment which are automatic.
7	Handling	Using your body or other work aids to work, move, or carry objects or materials.

EXAMPLE LESSONS FOR BEGINNING COMPETENCY

INFUSED ACTIVITY 1

Content area: Speech

Objective: Spontaneous Communication

Activity: Tell a joke.

Stage: Preparation.

Career Ed Objective: Working with people. Being able to tell a joke effectively requires a student to have beginning competency in the speech area, and in working with people. This could be labeled with a job title, but more important is self-insight into working with people.

INFUSED ACTIVITY 2

Content area: Math

Objective: Learning concept of rank order

Activity: Using batting averages, rank order the Pittsburgh Pirates players.

Stage: Preparation

Career Ed Objective: Working with numbers (data). In order to rank numbers, a student must have the beginning competency in numerical concepts. The teacher could discuss various careers of people who work with numbers.

INFUSED ACTIVITY 3

Content area: Metals Shop

Objective: Manual Dexterity - using a wrench.

Activity: Fix a bicycle handle bar.

Stage: Exploration

Career Ed Objective: The job title could be that [illegible] mechanic, but it is more important to stress personal awareness of beginning skills in working with things.

Module 15B: RESOURCES

Trainer Goal: Raise participant awareness of resources available for use in a career education program.

Learner Outcomes (Teachers and counselors only)

1. Identify available human resources useful in teaching career education activities.
2. Describe several ways of getting and using information about significant adults' or students' experiences.
3. List several sources of career education ideas from print or media resources.

NOTE: If available, set up a display of curriculum materials for career education before the module.

Materials/Resources

T-15B-1 "Objectives for Module 15B" (book)

T-15B-2 "Criteria for Selecting Print/Media Resources (class)

HO-15B-1 "Job Title Family Tree" (class)

HO-15B-2 "Guidelines for Using a Deaf Role Model" (book)

HO-15B-3 "Print/Media Resource Materials" (book)

chalkboard/chalk

Concepts

People Resources

Print Resources

PROCEDURES:

Time	Visuals	Trainer Narrative
0:00	Job Title list camera operator landscape artist flight attendant clergy salesperson hooker	A. Icebreaker: "What's My Line?" 1. Select a volunteer and ask him/her to come up front and select a job title from the list in Trainer's Manual. 2. Participants may ask the volunteer ten questions requiring only yes/no responses. One clue should be given before any questions, and a final clue is given after 5 questions. If 10 questions are asked, and no one can guess the correct title, the volunteer wins.
0:05	T-15B-1	B. Present the objectives for Module 15B using transparency T-15B-1. C. People Resources 1. School Workers a. Explain the application of "What's My Line" using school workers. b. Ask participants how they could infuse the use of these human resources from school. Encourage discussion if they have had experience with this activity.
0:25	HO-15B-1	2. Job Title Family Tree a. Hand out HO-15B-1 "Job Title Family Tree" and tell participants to view the diagram as a family tree.

Time	Visuals	Trainer Narrative
		b. Direct participants to list their own job title and fill in the form. Take a few minutes.
	chalkboard/chalk	c. Ask participants to report (round robin) each job title until about 25 jobs have been mentioned. As they are reporting, the facilitator should ask the group if the job is under data, people or things and list them on the board in the appropriate column. For jobs listed more than once, circle each report.
		d. Make the point that from a relatively small group of people, there will be familiarity with a large number of jobs. Students love to make family trees of their relatives, especially since the popularity of the TV series "Roots." This may be applied to career education in this way. A word of caution should be made regarding sensitivity toward children whose parents may not have jobs.
	HO-15B-2	3. Refer participants to the "Guidelines for Using Deaf Models", HO-15B-2, which is in their notebook.

Time	Visuals	Trainer Narrative
0:35		D. Media Resources

1. Ask participants to list criteria they feel are important in selection of print or media resources.

T-15B-2

Make sure the following points are covered in participants' generated list, using transparency T-15B-2.

- o Choose materials whose illustrations and language positively cancel stereotypes for sex, race, and handicapping conditions.
- o Increased expense is an advantage only if the developers will work with you to make the adaptations you want. Inexpensive materials may be just as well received and easier to adapt.
- o Choose materials with an eye for coordination with the total program.
- o Choose materials which involve hands-on-activities.
- o Any language level can be adapted.

2. One highly recommended resource for evaluating career education materials is the Educational Products Information Exchange Institute. Write for their kit for rating and selecting commercially available and teacher-made CE Materials. Write

Time	Visuals	Trainer Narrative
	chalkboard/chalk	out address on the board: EPIE, 475 Riverside Drive, New York, NY, 10027.
	HO-15B-3	3. Refer participants HO-15B-3 "Print/Media Resources Materials" Time Visuals Trainer Narrative and ask participants to list and discuss quickly any which they have used.
		4. Remind participants that they will meet with the large group for the next module.
0:45		E. Adjourn

JOB TITLE FAMILY TREE*

Directions: Fill in the family tree with your own job title and that of your parents. Also fill in your spouse's (or friend's) and his or her parents. Go back as many generations as you have information for.

Your mother's job title

Own job title

Your father's job title

Mother's job title
(female friend's)

Spouse's job title
(close friend's)

Father's job title
(male friend's)

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*Adapted from The 1978 Annual Career Education Handbook for Trainers, by Carolyn Raymond, editor, Palo Verde Associates, Tempe, AZ, 1978.

Trainer's Manual: Career Education and Planning Skills. MSSD/NTID National Project on Career Eduction, 1980.

GUIDELINES FOR USING A DEAF ROLE MODEL

The interview below helps to identify the rationale and process for using deaf role models in a career education program. The informant, Robert Menchel served as a national role model for the American Association for the Advancement of Science (AAAS) 1977-78, while on leave from Xerox Corporation.

Interviewers: Harry Lang: Associate Professor, NTID
Judy Egelston Dodd: Coordinator, NPCE

Respondent: Robert Menchel, Employment Opportunities Analyst

Introduction:

JED: Bob, can you tell us a little about your background?

RM: I have had four jobs, including the one at NTID. I had worked with the United States Air Force where I was employed as a physicist, predicting upper atmosphere weather results in the United States and was responsible for developing and evaluating a new weather system they were using. I left that job and took a job with AVCO Corporation. While I was employed at AVCO, I was involved with the upper space capsule for the Apollo program. I worked with the heat shield for the capsule that returned to Earth. I was laid off in 1965, and I came to Xerox that year as a physicist. I am what they call a xerographic specialist and this gave me a variety of jobs involving physics, both electrical and mechanical, in the xerographic process. In 1975 I met Martha Redden of AAAS. We decided there was a need for someone to go out and visit deaf children as a role model. I explained to Martha about the social service leave program at Xerox. I applied in the Fall of 1976 and out of 300 people, Xerox selected 30. I was very happy to be one of them. So in September, 1977, I started working with Martha as a role model, traveling across the United States and visiting schools for the handicapped, focusing mostly on the hearing impaired. I spoke to children, parents, teachers, counselors, college professors, and others. I tried very hard to show them that a deaf person is capable of going into any field that he or she wants. There are really no limits.

JED: Can you tell us why it's important for deaf students to see a live role model in their classroom?

RBM: It's very important for children to be exposed to someone that they can identify with. One of the most shocking things I experienced on my trip was to hear children say to me, "You're not deaf." They do not know that deaf people go to college.

Trainers Manual: Career Education and Planing Skills. MSSD/NTID National Project on Career Education, 1980

They have not met deaf persons who have been successful in their fields. It is simply a case of a lack of exposure.

HGL: How can classroom teachers locate deaf role models?

RM: That is really a hard question to answer. I think that one of the best ways right now is through the AAAS which has a listing of handicapped scientists. But I also think that NTID itself could become a resource center for deaf people if we want to focus on the deaf.

HGL: Can you tell us a little bit about what you are doing with Jeff Himmelstein?.

RM: One of the things Ann Swanson, Jeff, and I have been thinking very seriously about is the nationwide distribution of a summary paper using AAAS resource members. The summary paper will involve feedback from both handicapped scientists and from teachers. How have the teachers used a handicapped role model? How could they use one? Do they know of any role models locally? Right now we are just beginning to develop this idea.

JED: You said that maybe NTID could establish something. Do you know if Gallaudet College has set up any way to contact role models?

RM: No, I'm not aware of any projects if they have one. I think if we are looking at the technical area our own NTID graduates will be the best resources that we have. Where are our graduates and what are they doing? How can they be helpful in motivating other deaf youngsters to pursue careers in a variety of technical areas?

HGL: Are you familiar with the MSSD publication "The World Around Us?" There is a lot of exposure to deaf role models in that publication. Do you think we could do something like that at NTID with a focus on science?

RM: "The World Around Us" has often been displayed by Ben Thompson from the Science for the Handicapped Association. Research for Better Schools in Philadelphia has also published, "Is Science A Possible Career for you?" with filmstrips about some deaf people who are scientists. That is a start. To answer your question, Yes, I think NTID should have something on role models in science.

JED: I wonder if NTID has ever published some kind of directory of all its graduates and information on their employment. Is that something that is planned or is already completed?

RM: I think that it's a good idea that would combine very nicely with the resource book from the AAAS and would focus on the deaf. One of the things I have heard again and again is that there is so little material focusing on science for the deaf. At a meeting that I just came back from, the American Chemical Society, there was a lot of materials on orthopedically handicapped children and on the blind. When it came down to talking about the deaf, almost everyone said they can't find very much.

HGL: When someone is teaching in a program for deaf students and wants to find a deaf role model, are there any specific characteristics or specific job titles that are less desirable?

RM: OK, I think that we should look at some things that we want in a deaf role model. One of the things I think is important is that the person should have good communication skills. I do not mean they have to be highly verbal. They must have a good command of communication skills because they will be faced with a variety of situations, and they will have to understand how to handle them and respond in a positive way. You will be faced with not only children, but with parents, teachers, counselors, college and university people. You never know what will come up, so you have to be comfortable with people and be able to have confidence in yourself. You cannot be what we call a "deaf power" type of person. Pushing that is coming on too strong. That kind of person will turn people off. You have to recognize that you will be faced with both oral groups and total communication groups. You must be comfortable with either mode. You can't push one way or the other. You must be flexible.

HGL: If a school has a particular philosophy of communication it may be unwise for that school to invite a person with an opposing philosophy. It might cause some friction.

RM: I play the middle ground, neither emphasizing total communication nor oralism. Of course, I have both skills. I adapt to the place I am at. For example, when I was in the Clarke School, I respected their philosophy. They were communicating with the children without sign language. On the other hand when I was at the Austine School for the Deaf in New Hampshire, they used total communication and I communicated with them in signs. One thing that would come up along the way is that sometimes a school will put down other philosophies of communication.

You have to be very neutral. It's not very wise to say anything, especially while serving as a role model.

HGL: In general, you feel that good role models should respect a particular school's philosophy of communication. What about job titles? Are there any particular titles that are attractive? Unattractive?

RM: I really can't think of any job title that you should avoid. My feeling is that we should try to expose the children to a variety of scientific careers: chemists, physicists, engineering, whatever, and get them to understand the diversity of fields in science and medicine. It is not so much the title the person has but what a person can do, especially as a handicapped individual, or should I say in spite of the handicap.

JED: So you are saying that even a doctor or a nurse could be used for an interview with the students. If you could find a deaf person in that occupation, it would not build unrealistic dreams and aspirations to expose students to such a role model.

RM: Yes, but such a person also needs to have an interest in children; a real desire to communicate with children and the ability to bring himself or herself down to their level. You have to remember that you will be communicating with children who do not have your technical vocabulary. You have to feel comfortable when you are answering their questions in a way they will understand and at the same time you have to be professional enough to communicate with people at a higher level. You have to know your stuff and be well prepared.

HGL: When you travelled from school to school last year, what kind of information did you need before you walked into the classroom? What kind of information was helpful to you?

RM: The situation where I went into a school cold, knowing nothing about what I was going to step into was a negative one. After we got organized, the AAAS would usually send me the name of a person who would be meeting me, who they are, and a little bit of background information. This was helpful. For example, they may say, "Contact Ms so-and-so. She is a wonderful person who will take you around." Or "Don't make any comments about such and such in this school." It helps to know what you are stepping into. And if there are some hints about the children; maybe some are very bright, look for John Smith or try to talk to Mary Jane, things like that. Information about the schedule is also important. You will be talking to about 50 students in the morning and you will have lunch with a group of very bright deaf kids who are interested in science. In the afternoon you will be meeting with parents of the 7th graders. When I have it all worked out, I know exactly where I am going for the day, and I can prepare myself for it. Other ways they helped was in telling us ahead of time if the parents group is very active. You may be able to give them a lot of good information if you know ahead of time that they will be receptive. "Or the parents group is really not aware of opportunities", you may have to do some selling. This requires a different kind of mental preparation on the part of the role model.

HGL: What kind of information would be helpful for the students before you come? Do you think the teachers should help to clarify any misconceptions that the students may have about you as a deaf person?

RM: I think one of the best things that I saw along the way was at St. Joseph's School for the Deaf in St. Louis. The teachers had told the kids ahead of time that I was coming. The teacher explained to them what I did, physics, and they had posters in the hall from the AAAS meeting. There were pictures of me, John Gavin and of other deaf people. I noticed them along the wall, and the kids were prepared. The kids asked if I was married, if I danced, things like that. The kids' questions may have helped them in some ways, but it would have benefited them to be steered toward career oriented questions. There were young kids who were very excited and ready to pop their questions at me. I took time to answer them, sitting down at the desk or on the floor with the kids around me. I think for very young kids, that is most important. Someone is listening to their ideas.

HGL: Do you think a list is a good idea? Do you recommend that?

RM: I really liked the teachers using lists with their classes. It's a good idea, yes, because then the kids begin talking immediately. Before my visit, they could discuss who I am, what I do, why I am coming. If the teachers explained this before and let the kids read about other deaf scientists, the kids can prepare themselves for me. And then if they have some time after my visit for another discussion with their teacher, this would also be helpful. One classroom the teacher had the kids write what they got out of it. The teacher sent me those letters, some of them showed a lot of misunderstanding. Others were really very good. The kids understood what I was talking about. So I see those three things as a good way of doing it. A pre-visit discussion, the actual meeting with the role model, and the follow-up experience.

JED: I like the idea of sending your picture to the class ahead of time also.

RM: I think something like a poster, about deaf people who are in the sciences would be good. These are deaf scientists. This one will be here to visit our school. Let's talk about science with him or her. Prepare the kids.

JED: Our interview should also include a discussion of other subject areas where teachers will want to use role models for career education. I suspect that it will really be very hard to find someone in Social Studies or Business or other areas without a resource like that of the AAAS. But I'm sure that the contacts through AAAS, will lead those deaf people to other deaf people who are in those other areas, so maybe they can start with the science area first.

RM: I would like to add one thing here. To expose deaf children to successful deaf adults is important. The career education aspect is important. But so is the mere fact that that person up there is deaf. What questions should a role model expect? I can't answer that without saying "anything and everything." The kids want to know if you are married, if you have children? What do you do? Explain physics to me. Explain a Xerox machine! You have to be prepared for anything. One of the things you have to expect is that some kids have been put down by counselors, parents or teachers. They are really lacking in self confidence. They will ask you if they can become this or that. You have to answer them honestly and explain that they can. But you also have to be honest and explain the hard work that goes with it. The very fact that you are deaf too helps them to put trust in what you tell them.

HGL: If a role model like yourself plans to have a number of experiences in one year, should the role model work with the teacher on a questionnaire to see if the children really understood?

RM: Yes, one school did that and from the feedback, we could see that what I said did register, but not for all the kids. Some understood better than others. The feedback from the letters the kids sent me was very good. I think it's important that the teachers encourage that sort of thing. If we have somone preparing the children, preparing the teachers and some kind of follow up with the kids, the feedback will show us how effective we are and if we are doing what we hope to do. Really, I could have kept going for 5 more years. I loved it!

HGL: Were there any environmental modifications needed for your visit and, if so, what were they?

RM: I was faced with all kinds of situtations and had to make out the best I could. There were some places where they had interpreters. If it was for a group of hearing parents or if it was at a workshop for teachers, they had interpreters for me, but in many of the schools they just assumed they could communicate through one way or another. Now you have to expect that you will be faced with all kinds of situations. From small rooms to big auditoriums. The lighting may be poor and it may be late at night, or it may be a social atmosphere where they may have some kind of pre-meeting dinner or a reception. You will be faced with all kinds of situtaions. You never know what to expect from one visit to the next, without careful arrangments ahead of time.

JED: I'm curious if you would prefer to talk with a large group or with just a small group of kids.

RM: It really didn't matter to me. A good size group would be about 25 to 30 people. There were some times when I think I really didn't come across very well when we had an auditorium of 100 students. There were problems with that. There would be some fooling around and what I said didn't get across. A small group 25 to 30 or less worked very well. At one school for the deaf, I started talking to a small group of 4 or 5. The principal was there and said "Wait a minute. Let's move it into a bigger room where some more kids can come." And then we had about 50 teachers and kids. I started about 4 times. I ended up sitting on top of the lab table. It was informal and I think that the informal presentations are sometimes better for the kids, sitting on the floor, or on the top of the desk and just rapping rather than having a formal auditorium. Parents become comfortable with me when there is some kind of reception before my talk. A group of about 25 or 30 parents, pupils or counselors, is a good size group.

Sometimes the teacher was in the background of the class room. That's a good situation. Some teachers prepared the kids well and they were waiting for me. I took over one science class and I explained the science lesson to them in a way they could understand it. Later on the kids came up to me and asked, "Can you stay here and become my science techer?" How about that?

HGL: Can you tell us about any of the negative experiences you had?

RN: Negative experiences are situations where you can't really do anything. You have seen that the system for that group of kids has stereotyped them. There really is nothing you can do or say to help when you're there for such a short time. Really, you become very down at the end of a day when you go to one of those places . Some of the programs I saw had the kids down in the basement. The other kids in the school call them dumb, stupid. The deaf kids had very negative attitudes about themselves. They see deafness equal to slow learning. Then there were poor neighborhoods where the kids themselves have no real hope for anything. At some schools, the children had no understanding at all about work or anything. They were very low achievers. That was wrong. It evolved the wrong way. The teachers had asked us to come there, and it was the wrong situation. So be very careful to understand ahead of time what kind of kids you're communicating with. We can't reject going to poor neighborhoods. They need us. Maybe if we can help one kid, it will be worth it.

JED: Maybe those kids actually need to see you more than the others.

RM: I think so.

HGL: What about negative experiences that were a result of poor preparation for your visit.

RM: Some schools had a very poor set up... or poor schedules. They kept the kids from one school for 3 hours with me. This was too much. They should limit the time for one group of kids to not more than 1 hour. The remaining time can be used for things such as talking with teachers and parents. Not a constant 3 hours with the same kids. Too much! Don't mix different groups of kids either. This doesn't work well.

JED: I am curious if you yourself were ever treated badly in a school situation?

RM: Yes, there were places where you could come in and feel right away that the administration really didn't care about the handicapped children. The policy from AAAS was to stop at the office and use the time to talk with the principal. In many cases the principal was very responsive asked me to sit down and have a cup of coffee. In other cases, the negative, I was ignored. A student would be told, "Take Mr. Menchel down to the basement." I never met the administrator, and there was no planning for the visit. I was left sitting, waiting in the hall. They were not very motivated to have someone in. Maybe the best way to make contact with those schools is to find a particular teacher or someone who works with the deaf kids in the school first. Some school visits I didn't bother with the administrator. I went to the coordinator of the deaf program. In one school I had an interesting experience. The kids in the deaf program were being treated in a really degrading kind of way and one of the math teachers upstairs heard that I was visiting the school and asked me to talk to the classroom of hearing kids. Those kids were handicapped too, because they came from Spanish-Mexican family and they would go home and see their father on welfare. At first they thought it was funny to have a deaf person coming in to talk with them. I could see it in the way they acted, but after a few minutes they began to quiet down and then one of the kids asked me, "If you are so smart, can you do one of these math problems" I said "Well, pick one" and the kid picked one that would be the hardest word problem he could find and asked me to do it. So I went to the blackboard and I did it in one minute. They were so quiet. They were stunned from then on. The word must have spread around the school. There is a smart deaf mathematician here. The two classes I talked to were really very quiet and very respectful. I think it was a good experience.

HGL: I want you to think back to the times when you had more positive experiences. Do you have any suggestions for teachers to prepare or "stage" those situations?

RM: I think that preparing the kids ahead of time is probably the most important thing to do so that the kids understand why a role model is coming and who he or she is and everything like that. For example, a very positive response was related to me after visiting one school. At dinner that evening, I was sitting next to one of the teachers. She said to me that after I spoke, one of her students came up to her and said that I was very interesting. The student never thought about it before but she would like to become a chemist. Now I think that kind of feedback is important and when we see that, we know we are getting across to the kids. Another important response was at the same school. They had me in a classroom and they allowed the kids to talk to me about opportunities. There were not more than six or seven children in the class. They were prepared ahead of time. The teachers asked them to read up on things related to science careers. Other school visits that were positive experiences were almost always when kids had some scientific background. They had the best understanding of why I was there. Don't try to use a role model with kids that have no understanding of what that person is talking about.

HGL: Did you ever have the role model experience along with another deaf role model or with another handicapped role model?

RM: No, not really. We met some other handicapped people in Chicago. But we were not very successful with that. We were supposed to have a turnout at the University of Chicago but only about 5 people showed up. I never had the experience of cooperating with other role models, but we talked about that. Sometimes I think it would be a good idea to have two role models in two different fields working together.

JED: At what age level would you say a role model could best be used? Do you prefer a specific age kid to work with yourself?

RM: I can't really say any special age was best for myself. I enjoy the younger kids. I would really like to see them get started and progress along and understand science careers. We could look at where the role model would be most successful. If we could catch the kids in the beginning of the high school years when they are still excited about careers and have the opportunity to talk to someone who can give them guidance, this may be best. I think that it's important that we meet parents of children of all ages because parents need to prepare their kids on the way up. We need to give some hope to parents who will in turn give hope to their kids that they can still have opportunities.

JED: You were talking before about some embarrassing questions that the kids would ask you, and I wonder if you were ever asked how much money you make and what you say to them.

RM: I usually say, "Enough to live comfortably." One time I had two kids pushing me, so I gave them a ball park figure. Their teacher said, "If you want to earn that kind of money, don't become a teacher!"

JED: What if a teacher wanted to bring in a role model. Say they searched and couldn't find in the available resources anyone from outside the area but in their local area they find someone, a printer or data processing keypunch operator. Those careers are stereotyped for deaf people. Do you recommend that the teacher bring them in anyway?

RM: I think yes, but I would like the kids to have the opportunity to meet all kinds of deaf people. If we have those kinds, keypunch or printer or what have you, I think that they can be helpful in a different way in that they can talk to the kids about deafness and living. I think they also serve a purpose themselves in saying, "I wish I had more education so I could have gotten a better job." Or tell the kids to stay in school and go on for something.

If they can encourage the kids to go on for something better, then that serves a very good purpose.

HGL: Many deaf children have such a frustrating experience with language that they often establish their own internal barriers, especially with areas of a career requiring high language skill, eg. journalism, poetry, writing. I'd like to know if you feel exposure to many successful deaf people in literature, or through history, would help them have a more positive perspective on those fields which demand high level language skills.

RM: It's a little bit hard to answer that question, but I think, probably yes. My feelings about that come from some of the questions the kids ask me. Do you have to communicate with people? Do you have to write a lot? Do you have to have good English? Things like that. Now in those cases I know that they are afraid that they can't go into the sciences because of the language barrier, as you said. In those cases I'd say yes, I do have to have good English, writing, and communication skills, but that there are many different kinds of opportunities in science where you will not have to have a high level of writing or English. You can still be successful in that field. I try to describe jobs like working in a laboratory where you may have to do a lot of experimental work. You have to write some.

HGL: Research has shown that many young deaf adults have a much more positive attitude about continuing their education in language after a little work experience. Do you feel that one way teachers could motivate students in their language learning, is work experiences at a younger age?

RM: Yes, it would stimulate them by showing the need for communication on the job.

JED: Thank you, Bob, for your ideas and advice on the use of role models and for your support for career education.

Print/Media Resource Materials

Becoming Employably Skilled and Trained. BEST Program. Kenai Peninsula Borough School District, Oregon. June, 1974. Approx. 100pp. (CE7500819).

This curriculum guide is designed for junior and senior high school students with learning disabilities. The information and lessons are guided towards developing skills to succeed in community living. Teaching units include purchasing habits, budgeting, job-related behaviors, job search skills, home management and maintenance, physical health care, personal hygiene and grooming and functional signs (such as traffic and road, entrance and exit, and safety warnings). Each unit is broken into several subunits with specific skills, Stresses adaptability skills and job getting/seeking skills.

Career Development Curriculum. Scranton State School for the Deaf, 1800 North Washington Avenue, Scranton, PA 18509.

Career Education: A Bibiliography of Research Studies and Programs for Handicapped Americans. NTID/MSSD, One Lomb Memorial Drive, Rochester, NY 14623.

Career Education Curriculum Guide. Special School District of St. Louis County, 12110 Clayton Road, Town & Country, MO 63131.

Career Education for the Handicapped 1964-1974. Volume 2. Education Testing Service, Princeton, NJ. Prepared for Conference on Research Needs Relating to Career Education for the Handicapped. January 17-19, 1975.

A bibliography of research reports, demonstration projects, conference proceedings, and dissertations on career education for the handicapped. Abstracts are divided into sections on counselor roles and general counseling concerns, client characteristics, college, school and group counseling, self-concept, vocational and rehabilitation counseling, test selection, adminstration and interpretation. The abstracts are a combination of ERIC and DISSERTATION ABSTRACTS sources.

Career Education in the K-12 Classroom. Walter Smith, National Science Teachers Association, 1742 Connecticut Avenue, N.W., Washington, D.C. 20009.

Career Education Materials for the Learning Disabled. Division of Special Education, Caroll County, MD Board of Education (funded through Maryland State Department of Education, Vocational Guidance Division). Undated. 40pp. (CE7500320).

A bibliography of audio-visual materials (films, filmstrips, tapes activity kits, and high-interest-low vocabulary reading materials) for the senior high learning disabled and mentally handicapped. Materials stress self and career awareness, career exploration, and career decision-making.

Career Motivation Curriculum Supplement for K-6. Ohio Department of Education. Columbus, Ohio. 1974. 304pp. (CE7500867)

Trainee's Manual: Career Education and Planning Skills. MSSD/NTID National Project on Career Education, 1980.

Including in this curriculum guide is a nine (9) page unit (pp. 293-301) on career motivation for primary educable mentally retarded (EMR) students. It includes general and specific objectives and a unit to introduce the child to his/her environment through specialized workers in delivery and installation services. Teacher's and children's bibliographies are included. Emphasizes career awareness and career exploration.

Career Education Resource Guide-Career Awareness. Atlanta Area School for the Deaf, 890 North Indian Creek Drive, Clarkston, Georgia 30021.

CES (Career Education Service) - Grades K-8 and 9-12. Health Education Research, Inc., 875 North Michigan Avenue, Suite 1850, Chicago, Illinois 60611.

Career Information Center. Butterick Publishing, 708 Third Avenue, New York, NY 10017.

Career Opportunities for the Deaf Students - Career Brief Series. (40 in series). Dr. Harold L. Murson, 501 Lattimore Hall, University of Rochester, Rochester, NY 14627.

Career Planning Support System - Coordinator's Handbook & Training Guide. The Center for Vocational Education, The Ohio State University, 1960 Kenny Road, Columbus, Ohio 43210.

Career Program Resources: A Media Supplement. Wisconsin Vocational Studies Center, University of Wisconsin, Madison, Wisconsin.

Career Related Science Units. National Center for Career Education, University of Montana, P.O. Box 7815, Missoula, Montana 59807.

Careersort - Exploration Handbook. Colorado Career Information System, Willard Administrative Center, University of Colorado, Boulder, Colorado 80309.

Centergram (Free). National Center for Research in Vocational Education, Ohio State University, 1960 Kenny Road, Columbus, Ohio 43210.

Civil Rights Digest - "New Rights for the Handicapped". Civil Rights Digest, U.S. Commission on Civil Rights, Washington, D.C. 20425.

Color Me Working. Special School District of St. Louis Company, 12110 Clayton Road, Town & Country, MO 63131.

Criteria Integration of EMR Pupils into Vocational Classes. Summer Workshops, 1975. Exemplary Career Education Project, Springfield Public Schools, 525 Mill Street, Springfield, Oregon 97477. 1975. (CE7502755).

This booklet uses the Food Services Cluster and the Metals, Mechanics and Wood Fabrication Cluster as examples of jobs where content areas can and should be integrated for the EMR student. For example, important areas described within the foods and industrial clusters are: reading, writing, and vocabulary skills, mathematics skills, including measuring and knowledge of the implements, tools and methods in the area the student is entering.

Critical Issues in Career Education for Handicapped Students. Donn Brolin, Department of Counseling & Personnel Services, University of Missouri - Columbia, and Bruno D'Alonzo, Department of Special Education, Arizona State University, Tempe.

On the Development of a Career Education Program: Content and Process. Patricia K. Heffernan, Rochester School for the Deaf, 1545 St. Paul Street, Rochester, NY 14621.

Dimensions-Muscatine High School Work Study Program. Muscatine Community School. Muscatine, Iowa. September, 1973. 50pp. (CE7500434).

"Dimensions" is a senior high work-study program for the educable mentally retarded (EMR) student. It is designed to help bridge the gap between high school and the world of work. The booklet discusses philosophy and goals (academic and vocational) including standards for extablishing a program. Some small teaching units are included, e.g. "Home Care-Nursing and First Aid Experience" and "Care Maintenance Experience". Also included are sample forms for student and employer evaluation and daily planning. Stresses career entry.

Dormitory & Apartment Living - The Training Apartment Program. Debbie Elliott, MSSD, Gallaudet College, Washington, D.C. 20002.

The Efficacy of Career Education: An Update. Sidney High, Jr., Office of Career Education, U.S. Office of Education, Washington, D.C.

Elementary Career Education Curriculum Upper Grade Level, Intermediate, & Primary. (3 in set). Portland Public Schools, Regional Program for the Deaf, 7910 S.E. Market, Portland, Oregon 97215.

EMH Unit #1 - Food Related Occupations. WACOP Project, Glendale, Arizona. 1973. 19pp. (CE7502189).

EMH Unit #2 - Service Related Occupations. WACOP Project, Glendale, Arizona. 1973. 35pp. (CE7502191).

EMH Unit #3 - Attitudes and Values. WACOP Project, Glendale, Arizona. 1973. 71pp. (CE7502192).

EMH Unit #4 - Manufacturing Occupations. WACOP Project, Glendale Arizona. 1973. 51pp. (CE7502191).

** All Materials Available Through WACOP Media Center:
WACOP Media Center
6836 North 58th Drive
Glendale, Arizona 85301
(602) 931-2424

Exemplary Activities in Career Education Relating to Science. National Science Teachers Association, 1742 Connecticut Avenue, N.W., Washington, D.C. 20009.

Fair Textbooks: A Resource Guide. U.S. Commission on Civil Rights. Clearinghouse Publication 61. December 1979. 430pp.

A Glance at the Vocational Department of Michigan School for the Deaf. Michigan School for the Deaf, West Court Street/Miller Road, Flint, Michigan 48502.

Goals - Career Awareness for the Deaf Education Resource Curriculum Guide-Pre-Kindergarten - Grade 12. South Dakota School for the Deaf, Sioux Falls, SD. June, 1975. 255pp. (CE7502851).

A K-12 Curriculum guide for the deaf student. The goal of the program is to encourage deaf students to "look more closely at their own personal strengths and weaknesses which will affect future career choices, and to become more aware of important aspects of work and workers". Guide is organized by grades through the intermediate level and by career clusters on the secondary level. Includes a lengthy chapter on job seeking skills and also a listing of post-secondary educational facilities for the deaf. All lesson plans include teacher objectives, resource materials, and instructional activities. Some lessons also include special vocabulary.

Identifying Well-Evaluated Activities in Career Education. J. Hamilton & O. Baker, American Institutes for Research, Palo Alto, California.

If you are involved in Career Development We Can Help (Free). The National Center for Research in Vocational Education, The Ohio State University, 1960 Kenny Road, Columbus, Ohio 43210.

Information Is Our Middle Name. Colorado Career Information System, An Interagency Consortium for Career Development, University of Colorado, Boulder, Colorado 80309.

"It's What You Can Do That Counts!" Trainer's Planning Manual. Mesa Public Schools, Arizona Department of Education, 549 North Stapley Drive, Mesa, Arizona 85203.

The Journal for Vocational Special Needs Education - Inaugural Issue. Vocational Personnel Program, 150 Whitmyre Hall, Indiana University of Pennsylvania, Indiana, PA 15705.

Kendall Demonstration Elementary School Career Education Project. Mr. Ben Provance, KDES, Kendell Green, Washington, D.C. 20002.

Key Resources in Career Education: An Annotated Guide. The National Institute of Education, U.S. Department of Health, Education & Welfare, Washington, D.C. 20208.

A Kit of Career Education Assessment and Evaluation Instruments. Wisconsin Department of Public Information.

Language Factors in Vocational Evaluation of Mentally Retarded Workers. R. Malgady & P. Barcher, SUNY, Brockport, and G. Towner & John Davis, Work Experience Center, Rochester City School District, Rochester, New York.

Managing Family Finances - An Instructional Activity Guide for Teachers of Handicapped Children. Special School District of St. Louis County, 12110 Clayton Road, Town & Country, MO 63131.

Movin' On - A Resource Guide for Young Adults. Special School District of St. Louis County, 12110 Clayton Road, Town & Country, MO 63131.

Motel Career - Special Education. Hazard High School, Hazard Independent Schools, Hazard, Kentucky. July, 1974. 7pp. (CE7603940).

A teaching unit covering the motel-related careers for special education classes. Some occupations included are - room clerk, telephone operator, hostess, and janitor. An evaluative objective is given in several content areas to infuse this unit in the regular curriculum.

Necessary Work Values, Habits & Attitudes. David Beach, School of Technology, Bowling Green State University.

NSTA Career Education News. NSTA/Career Education, 1742 Connecticut Avenue, N.W., Washington, D.C. 20009.

O.A.S.E.S. Resource Curriculum Guide - Volume I - Self-Awareness. Sioux Falls Independent School District #1, Sioux Falls, South Dakota. August, 1975. Approx. 500pp. (CE7502841).

O.A.S.E.S. Resource Curriculum Guide - Volume II - Career Awareness. Sioux Falls Independent Schools District #1, Sioux Falls, South Dakota. August, 1975. Aprox. 500pp. (CE7502840).

O.A.S.E.S. (Occupational Awareness for Special Education Students) curriculum guides give a detailed course of study for EMR students on primary, intermediate, and advanced (junior high) levels. The major goal of the program is to make the individual "socially acceptable", that is a self-sufficient, contributing member of the working world. Volume I deals with emotions and self-image on a graduated level of sophistication, while Volume II uses the same difficulty format, but is oriented around career clusters. Each lesson is complete with objectives, activities and resources.

Occupational Evaluation of Special Students. Vocational Education for the Handicapped Unit, Region 10. Education Service Center, Richardson, Texas. Undated. Approx. 150pp. (CE7500736).

This booklet contains sections on student values and student interests as well as physical ability tests for fitness and motor skills. Also, skills tests for observation, recall, and response are included. Stresses career and self-awareness.

Occupational Exploration, Middle Grades "Special Needs". Pitt County Schools, P.O. Box 776, Greenville, NC. Undated. Approx. 100pp. (CE7500197).

Designed for 7th & 8th grade students who do not posses "sufficient communication skills, computation skills, or do not have the attitude necessary to succeed in a regular occupational program." A series of 2-3 page lesson plans in language arts, mathematics, science, home economics, and trade and industrial occupations. Each includes an instructor's guide sheet and a student activity sheet.

An Overview of Career Education. St. Mary's School for the Deaf, 2253 Main Street, Buffalo, NY 14214.

Perceptions of Educators of the Deaf Toward Career Education Goals for Secondary Level Deaf Students. Edward Albert Marrugi, University of Minnesota (Dissertation). December, 1974. 216pp. (CE7603875).

A dissertation which covers definition of terms, background, and history, development of a survey instrument, gathering statistical data, and evaluation and findings.

Preparing for the Job Interview: An Interdisciplinary Unit for Deaf Students. Judy Athey, Career Information and Activities, Western Maryland College, Ms. Margery Cook, Instructor. August, 1974. 16pp. (CE7500861).

A teaching unit which encompasses the needs of the deaf student. Many things that would be considered as routine practice in a job interview for the hearing student require special attention and preparation for the deaf student. This unit incorporates career entry with language and reading and with several other subjects to a lesser degree. Stresses career preparation and career entry.

Project CAREER - Analysis of the Coding for the Special Needs Population. March, 1974. 14pp. (CE7603693).

Project Career - The Career Model. January 29, 1974. 7pp. (CE7502813.)

Project CAREER Curriculum Data Guide "Marketing and Distribution". Undated. 20pp. (CE7502193).

Project CAREER's Pilot Implementation Program for Students with Special Needs in Milford Public Schools, Milford, MA. June 17, 1974. (CE7501175).

Project CAREER's Pilot Implementation Program for Students with Special Needs in Randolph Public Schools, Randolph, MA. June 17, 1974. 139pp. (CE7501176).

Project CAREER's Workshop Orientation for Special Needs Personnel. October, 1974. approx. 100pp. (CE7500104).

All Project CAREER materials available through:

Project CAREER
301 North Main Street
Randolph, MA 02368
(617) 963-8653

Project SCAN - Successful Career Planning through Assessment of Vocational Needs. Special School District of St. Louis County, 12110 Clayton Road, Town & Country, MO 63131.

Resource Directory of Handicapped Scientists. American Association for the Advancement of Science, 1776 Massachusetts Avenue, N.W., Washington, D.C. 20036.

Resource Guide for Career Education. Kendall Demonstration Elementary School, Kendall Green, Washington, D.C. 20002.

A Resource Guide for SH Teachers. Special School District of St. Louis County, 12110 Clayton Road, Town & Country, MO 63131.

Review and Critique of Strategies for Determining Career Education Curriculum Content. C. Finch and J. Crunkilton, Virginia Polytechnic Institute and State University, Blacksburg, VA.

Sample Booklet of Career Education Guides K-12. Joint School District No. 5. Eau Claire, Wisconsin 54701. January, 1973. 90pp. (CE7500100).

Contains six pages of small learning units for special education on the high school level. Concepts and resources suggested. No procedures given.

Science for Handicapped Students in Higher Education. American Association for the Advancement of Science, 1776 Massachusetts Avenue, N.W., Washington, D.C. 20036.

Special Education, Career Education-Self Awareness. Cartwright School District #83, Phoenix, Arizona. 1973-1974. 140pp. (CE750907).

A curriculum guide adaptable to primary, intermediate, and upper grade levels designed to assist the instructor in giving specific training in the area of self-awareness to the special education student. Understanding of the relationships between where the student is now, to what is needed for her/him to become a mentally, emotionally, and physically healthy adult is the focal point. The six teaching units included are physical, emotional, familial, social and occupational self-awareness plus a culminating unit which summaries the others. Designed to be used over an entire school year.

Student Workbooks - Getting A Job, Self-Understanding, Getting Along with Others. (3 in set). Model Secondary School for the Deaf, Kendall Green, Washington, D.C. 20002.

Teaching & Learning for Careers Teaching Institute Newsletter. RIT, One Lomb Memorial Drive, Rochester, NY 14623.

TIGER - (Towards Individual Growth by Experiencing Reality). Career Alternative Project, Special School District of St. Louis County, 12110 Clayton Road, Town & Country, MO 60004.

Vocational Education and Special Education: A New Partnership in Career Education. Journal of Career Education, College of Education, University of Missouri-Columbia, Columbia, Missouri 65211.

Vocational Education for Special Needs Students. Special School District of St. Louis County, 12110 Clayton Road, Town & Country, MO 63131.

World of Work K-10 Continuum. Warren City Schools Department of Career Education. Warren, Ohio. Undated. 36pp. (CE750036).

Designed for a primary level special education class for slow learners (chronological age 7-10, mental age 3 1/2-8), this resource unit entitled "Workers Who Come to Your Home" was implemented to meet the needs of these children. Since their interest and awareness levels tend toward their immediate environment, this unit emphasizes all the specialized workers who might deliver, install, or repair things in the children's homes. Content for each occupation and activities to accompany it are more clearly defined. Teachers and childrens' bibilography included. Stresses creer exploration.

WSD Career Development Program. Wisconsin School for the Deaf, 309 West Walworth, Delevan, Wisconsin 53115.

Is a Career in Electronics Manufacturing For You? 16:33 min.
Details the work in plants, offices and labs; covers careers from assembly and research to shipping and clerical.

Is a Career in Clerical Work For You? 15:37 min.
Examines 14 different clerical occupations including computer operators and shipping clerks.

Is a Career in the Professions for You? 14:10 min.
Looks at all Professional careers from medicine and law to teaching, engineering and athletics.

Is a Career in Management For You? 14:10 min.
Describes the work of over 9,000,000 people in top, middle and first-line management.

Is a Career in Business Administration For You? 16:03 min.
Includes an analysis of careers in accounting, personnel, marketing and other business occupations.

Is a Career in the Restaurant Business For You? 13:00 min.
Looks at every career in large restaurants and small ones as well as in food service in factories, stores, schools and hospitals.

**Is a Career in the Social Sciences For You? 14:41 min.
Describes careers in each of the six major social science areas.

Is a Career in Banking For You? 15:37 min.
Examines occupations in various kinds of banks, loan companies and other financial institutions.

Is A Career in Motor Vehicle or Equipment Manufacturing For You? 13:45 min.
Careers in engineering, assembly, maintenance, research and management.

Is a Career in Motor Freight Transportation For You? 14:52 min.
Describes occupations like dispatcher, trucker and mechanic as well as support personnel in sales, accounting and management.

Is a Career in the Textile or Apparel Industry For You? 16:10 min.
Numerous opportunities in artistic careers (design), business careers and manufacturing careers.

*Is a Career in the Natural Sciences For You? 13:46 min.
Exciting careers in chemistry, physics, astronomy, zoology, and many other of the natural sciences.

*Is a Career in the Aero-Space Industry For You? 14:11 min.
Surveys careers in engineering, research, clerical, technical and skilled trades, assembly, management and several others.

Is a Career in the Telephone Business For You? 15:34 min.
Includes opportunities in dozens of occupational groups in the telephone and telecommunications areas.

Is a Career in Structural Work For You? 16:00 min.
Covers careers such as electirican, iron worker, stone mason, plumber and others that construct and maintain our buildings, highways and bridges.

*Is a Career in Industrial Chemicals For You? 14:50
Examines careers in research, production and sales, especially for scientists, engineers and technicians.

Is a Career in the Electric Power Industry For You? 13:10 min.
Considers careers ranging from power plant operator to customer services; from research technician to substation manager.

Is a Career in the Performing Arts For You? 16:00 min.
Discusses the talent and hard work necessary in the competitive fields of singing, dancing, acting, writing, sports and other professional areas.

Is a Career in Processing For You? 15:00 min.
Occupations in refining, mixing, heating, and other areas that convert natural resources into finished products.

Is a Career in Fishing or Forestry For You? 15:45 min.
Careers from hatchery operator and game warden to land developer and forestry management.

Is a Career in Food Preparation For You? 12:50 min.
Describes the work of nutritionists, research scientists, food technicians, assembly workers, meatcutters, bakers and many more.

Is a Career in Civil Aviation For You? 15:56 min.
Discusses cockpit and cabin careers as well as all of the numerous supportive ground services.

Is a Career in Bench Work For You? 13:55 min.
Shows us those skilled workers who fit, grind, carve, assemble and repair such things as jewelry, TV, instruments, etc.

*Is a Career in Atomic Energy For You? 15:17 min.
Opportunities in science, math, skilled crafts, administrators, clerical workers and technicians.

Is a Career in Iron and Steel For You? 15:06 min.
Looks at careers in processing, maintenance, operations, administration, and research.

Is a Career in the Pulp and Paper Industry For You? 16:09 min.
Positions in production, engineering, electrical, technical, professional, administrative and clerical areas are examined.

Is a Career in Mining, Petroleum or Gas Production For You? 15:53 min.
Careers as diverse as drillers, mining machine operators, mechanics, pumpers, engineers, geologists, etc.

Is a Career in Agri-Business For You? 15:26 min.
Farmers and farm workers of course, but also their partners in financial credit, transportation, supply, power, marketing, etc.

Is a Railroad Career For You? 14:06 min.
Includes careers as operating worker, attendant, communications and office worker, attendant, communications and office worker, equipment and maintenance specialist, and administrator.

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Captioned Films

Available from Counselor Films Inc.
146 Montgomery Avenue
Bala Cynwyb, Pennsylvania 19004

* Is A Career as a Technician For You? 14:39 min.
Describes careers in numerous industrial, commercial, scientific and governmental settings.

* Is a Career in the Health Services For You? 14:41 min.
A look at health careers ranging from patient care and food preparation to administration and housekeeping.

Is a Sales Career For You? 14:50 min.
Shows the variety of sales careers and their importance to our economy.

Is a Career in Machining For You? 15:40 min.
An in-depth examination of each of the machining categories.

Is a Career in the Service Industries for You? 15:10 min.
Shows us various careers in each of the eight service categories.

** Is a Career in Government For You? 15:12 min.
Discusses careers common to both government and private sector.

Is a Career in Radio and Television For You? 14:40 min.
Includes careers in the four broadcasting categories of engineering, programming, sales and business.

Is a Career in the Hotel or Motel Business For You? 14:15 min.
We see the four categories unique to this industry as well as occupations essential, but not unique, to the lodging business.

Is a Career in Finance, Insurance or Real Estate For You? 15:39 min.
Close-ups on numerous careers in all three important industries.

* - APPLICABLE TO SCIENCE
** - APPLICABLE TO SOCIAL STUDIES

Roadmap of Content and Modules

I. These modules provide administrators, teachers and counselors with basic career education background. New concepts include stereotyping, infusion of the CCEM model and collaboration with community programs.

II. These modules provide administrators, teachers and counselors with basic planning background. Appreciation for a systematic approach and a common language for the planning process should result.

IIIA. Administrators will be exposed to the NPCE implementation process and learn how to lead a group to consensus.

IIIB. Teachers/Counselors will receive indepth practice in curriculum infusion of the elements of the CCEM.

IV. All team members will prepare an implementation plan for their most urgent goals.

I
Modules 1 - 7
Career Education

II
Modules 8 - 11
Planning

III
Modules 12 - 15
A Implementation
B Career Education

IV
Modules 16 - 18
Implementation

Module 16: SHARING WHAT YOU'VE LEARNED

Trainer Goal: Provide unstructured time for members of each school team to share what happened in the parallel modules.

Learner Outcomes

1. Be aware of and appreciate the unique role and strengths each member brings to their team.
2. Specify how the team will operationalize the new concepts learned.

NOTE: School superintendents or program administrators for each participant school will be attending this module. Facilitators should be sensitive to the impact of the superintendent's presence on the dynamics of the group. Name tags should be provided before the module.

Resources/Materials	Concepts
T-16-1 "Roadmap of Content and Modules" (book)	Team Development
T-16-2 "Objectives for Module 16" (book)	
HO-16-1 "Team Development Scale" (class)	
Prizes for each circle of "Experience Counts"	

PROCEDURES:

Time	Visuals	Trainer Narrative
0:00	T-16-1 T-16-2	A. Present T-16-1, the "Roadmap" for the workshop, and the objectives for Module 16, T-16-2.
		B. "Experience Counts"

1. Direct participants to stand in a circle. If there are more than 15 participants, divide into 2 circles, preferably keeping team members together. Go around the circle and ask each participant to list one job, NOT a school-related position (teacher, administrator, counselor) at which they have worked for at least 3 months sometime in their lives. The job may have been full or part time and/or voluntary. Do NOT name:
   - a school-related position
   - a teacher of any kind
   - different functions of the same job
   - homemaking/child rearing functions performed for your own family.

   If participants have never worked outside of an academic job, and can't list anything when it is their turn, they move to the inside of the circle and sit down.
2. After going around once, ask participants to list another different job at which they worked,

Time Visuals Trainer Narrative

outside of school. If participants can't list a second job experience, they sit down. Keep going around the circle listing different jobs each time until the most experienced job holder is left standing.

Prize(s) Award a prize to the winner in each circle.

0:10 C. Sharing

1. Introduce the superintendents to the large group.
2. School teams should sit together. Direct administrators to summarize for their team members and their superintendent the content of Modules 12A-15A. Teachers and counselors should summarize the content of Modules 12B-15B for their administrators. Take about 20 minutes.

0:30 D. Team Development

HO-16-1

1. Reassemble participants in the large group and hand out HO-16-1 "Team Development Scale." Cover the following points:
   - o Diverse backgrounds and experiences such as those just listed in "Experience Counts" provide strengths for a career education team.
   - o It takes effort to work well as a team.

Time Visuals Trainer Narrative

- Communication and team work are essential. Unique strengths of individuals should be used for the advantage of the team.
- The instrument they are about to complete will help show how well they work as a team and what they can do to improve their team work.

2. Direct participants (not superintendents) to complete the scale, working individually, identifying only their school, and their team members but not their own names. All responses will remain anonymous. After 5 minutes, collect the instrument.
3. After collecting the papers, recommend that each team debrief on the nature of their responses.

0:45 E. Adjourn

265

Team Development Scale*

School:____________________

Training Site:____________________

Date____________________________

List names of your team member, and circle the team leader's name (Be sure your name is included on list) but do not identify yourself.

1.____________________
2.____________________
3.____________________
4.____________________

Directions: Place a large X in the box containing the most appropriate description of your perceptions of your team.

1. To what extent do I feel a real part of the team?

Completely a part all the time.	A part most of the time.	On the edge, sometimes in, sometimes out.	Generally outside, except for one or two short periods.	On the outside, not really a part of the team.

2. How safe is it in this team to be at ease, relaxed, and myself?

I feel perfectly safe to be myself, they won't hold mistakes against me.	I feel most people would accept me if I were completely myself, but there are some I am not sure about.	Generally, you have to be careful what you say or do in this team.	I am quite fearful about being completely myself in this team.	A person would be a fool to be himself or herself in this team.

3. To what extent do I feel "under wraps," that is, have private thoughts, unspoken reservations, or unexpected feelings and opinions that I have not felt comfortable bringing out into the open?

Almost completely under wraps.	Under wraps many times.	Slightly more free and expressive than under wraps.	Quite free and expressive much of the time.	Almost completely free and expressive.

---

* Adapted from "Team Development Scale". Team Building: Issues and Alternatives by William G. Dyer, Addison-Wesley Publishing Co.: Reading, MA. 1977, pp. 68-70.

4. How effective are we, in our team, in getting out and using the ideas, opinions, and information of all team members in making decisions?

We don't really encourage everyone to share their ideas, opinions, and information with the team in making decisions.	Only the ideas, opinions, and information of a few members are really known and used in making decisions.	Sometimes we hear the views of most members before making decisions and sometimes we disregard most members.	A few are sometimes hesitant about sharing their opinions, but we generally have good participation in making decisions.	Everyone feels his or her ideas, opinions, and information are given a fair hearing before decisions are made.

5. To what extent are the goals the team is working toward understood and to what extent do they have meaning for you?

I feel extremely good about goals of our team.	I feel fairly good, but some things are not too clear or meaningful.	A few things we are doing are clear and meaningful.	Much of the activity is not clear or meaningful to me.	I really do not understand or feel involved in the goals of the team.

C-215

6. How well does the team work at its tasks?

Coasts, loafs, makes no progress	Makes a little progress, most members loaf.	Progress is slow, spurts of effective work.	Above average in progress and pace of work.	Works well, achieves definite progress.

7. Our planning and way we operate as a team is largely influenced by:

One or two team members.	A clique	Shifts from one person or clique to another.	Shared by most of the members, some left out.	Shared by all members of the team.

8. What is the level of responsibility for work in our team?

Each person assumes personal responsibility for getting work done.	A majority of the members assume responsibility for getting work done.	About half assume responsibility, about hald do not.	Only a few assume responsibility for getting work done.	Nobody (except perhaps one) really assumes responsibility for getting work done.

9. How are differences or conflicts handled in our team?

Differences or conflicts are denied, suppressed, or avoided at all cost.	Differences or conflicts are recognized, bur remain unresolved mostly.	Differences or conflicts are recognized and made to work them through by some members often outside the team meetings.	Differences and conflicts are recognized and some attempts are made to deal with them in our team.	Differences and conflicts are recognized and the team usually is working them through satisfactorily.

10. How do people relate to the team leader, chairperson, or "boss"?

The leader dominates the team and people are often fearful or passive.	The leader tends to control the team, although people generally agree with the leader's direction.	There is some give and take between the leader and the team members.	Team members relate easily to the leader and usually are able to influence leader decisions.	Team members respect the leader, but they work together as a unified team with everyone participating and no one dominant.

11. What suggestions do you have for improving your team functioning?

12. What suggestions do you have for improving this instrument? Please use the back of this page to continue your answer if necessary.

Trainer's Manual: Career Education and Planning Skills, MSSD/NTID National Projedt on Career Education, 1980.

Module 17: PLANNING YOUR PLAN (Double Module)

Trainer Goals: Provide unstructured time for teams to begin developing their implementation schedule.

Provide an opportunity to practice using the NPCE Implementation Forms.

Learner Outcome

1. Develop and hand in a pre-plan consisting of at least 3 goals.

Materials/Resources

T-17-1 "Objective for Module 17" (book)

HO-17-1 "NPCE Implementation Form" (class)

HO-17-2 "Example NPCE Implementation Form" (optional)

All Facilitators

Concepts

No new concepts

PROCEDURES:

Time	Visuals	Trainer Narrative
0:00	T-17-1	A. Present the objective for Module 17 using transparency T-17-1.
		B. NPCE Implementation Form
	HO-17-1	1. Hand out HO-17-1, "NPCE Implementation Form."
		2. Direct the team leader to familiarize their team members with the NPCE Implementation Form. The chief administrator is present to provide specific knowledge of local resources and support. Module 18 will summarize the sources of support for implementation, and a workshop evaluation will be administered.
		3. Each team will have 80 minutes to specify at least three goals and to accomplish as much as they can toward a comprehensive implementation plan to meet those goals during this double module. Refer each team back to their plans developed in Modules 8-11 (HO-11-1).
1:20		C. Sharing
		1. Ask each team leader to list their 3 goals.
		2. Collect the pre-plans (Be sure each team keeps at least one copy of their pre-plan for themselves.)
1:30		D. Adjourn

Career Education/Planning Skills
Module 17

HO-17-1
(class)

NPCE IMPLEMENTATION FORM

Directions: State your career education goal in the space provided. Under each step, document the specific action you will take and/or the data you will need.

GOAL # One: ______________________________
(Step 3 of planning process)

TASK/ACTIVITY	TIMELINES	RESOURCES (equipment, services, personnel, travel, admin. support)

EVALUATION OF GOAL
(Step 4 of Planning Process)

Trainer's Manual: Career Education and Plannings Skills. MSSD/NTID National Project on Career Education, 1980.

Directions: State your career education goal in the space provided. Under each step, document the specific action you will take and/or the data you will need.

GOAL # Two: ____________________
(Step 3 of planning process)

TASK/ACTIVITY	TIMELINES	RESOURCES (equipment, services, personnel, travel, admin. support)

EVALUATION OF GOAL
(Step 4 of Planning Process)

Directions: State your career education goal in the space provided. Under each step, document the specific action you will take and/or the data you will need.

GOAL # Three: ____________________
(Step 3 of planning process)

TASK/ACTIVITY	TIMELINES	RESOURCES (equipment, services, personnel, travel, admin. support)

EVALUATION OF GOAL
(Step 4 of Planning Process)

EXAMPLE: NPCE IMPLEMENTATION FORM

Directions: Read the example below. Note that it continues the example plan from HO-11-2, "Goal Setting Worksheet."

GOAL (example)
Design two units in social studies with infusion of the concepts related to employability skills, by Sept. 1st.

Tasks (example)	Timelines	Resources
1. Meeting with social studies teacher and chair of Voc. Ed. Dept.	1. by May 30 set by principal	1. a) Friday schedules are open in afternoons. b) Principal's office is available.
2. Review of social studies curriculum and selection of two unit topics.	2. by June 15 reviewed by chair of Voc. Ed. Dept.	2. Syllabus available in library. CCEM chart is in notebooks.
3. Meeting with social studies teacher and chair of Academic Dept.	3. by June 15	3. Weekly meetings
4. Write up lessons.	4. by Aug. 1, done by social studies teachers	4. Voc. Ed. classrooms are available. Sample lessons in Voc. Ed. teacher's guide.
5. Lessons reviewed and approved.	5. by Aug. 15 by principal	5. Mail service

EVALUATION (example) Two units taught first quarter. Students achieved average 75 percent.

Module 18: IS THERE LIFE AFTER A WORKSHOP?

Trainer Goals: Inform participants of the resources for technical assistance available as potential follow-up to the workshop.

Evaluate the effectiveness of the workshop.

Learner Outcome

1. Report clear understanding of sources of assistance for implementation of pre-plan goals.

Materials/Resources

T-18-1 "Objective for Module 18" (book)

HO-18-1 "Workshop Questionnaire" (class)

HO-18-2 "Content Test" (optional)

Newsprint & markers

All facilitators

Concepts

Technical Assistance

Networking

PROCEDURES:

Time	Visuals	Trainer Narrative
0:00	T-18-1	A. Present the objective for Module 18 using T-18-1.
		B. Technical Assistance
	Newsprint	1. Ask participants to brainstorm the kinds of help they will need to implement their comprehensive career education plan. Accept all responses, listing them on newsprint as they are contributed.
		2. Allow 5 minutes for each team to decide which items are available or appropriately provided by their own school administration. Ask each team to report to the group.
0:25		3. The trainer and participants should spend a few minutes problem-solving where the remaining kinds of assistance will come from. If the training team has resources from their sponsoring institution, this is the time to reveal the kind of resources available. If the administrators from the participant teams (superintendents or team leaders) can offer help to another team, urge that it be offered at this time. Conclude by bringing closure to as many of the items as possible. Encourage networking among teams to share their expertise and resources.
0:35		C. Parting Statements

Time Visuals Trainer Narrative

1. Ask participants and cofacilitators if anyone would like to say anything to the group before departing.

2. After others are finished, but saving at least 5 minutes for the evaluation, the trainer should relate the following story:

Little Sara was put to bed at her normal bedtime. A short time later her parents heard a loud thump from her room. They rushed in to check and found her sitting on the floor beside her bed, whimpering and sucking her thumb vigorously. Her mother asked, "Did you fall out of bed?" Sara nodded tearfully. Her father asked, "How did that happen? You've never fallen out of bed before!"

Sara responded, "I guess I stayed too close to where I got in!"

Make the point that the participants have just begun their work in the implementation of their comprehensive CE plan. They should not "stay too close to where they got in," but should plunge into the effort with energy for the duration of the program.

0:40 D. Workshop Evaluation

Time	Visuals	Trainer Narrative
	HO-18-2	1. Distribute the Content Tests, HO-18-2 (optional).
	HO-18-1	2. Collect the content tests, if given. Hand out the Workshop Questionnaire, HO-18-1. Collect the papers.
0:45		E. Adjourn.

WORKSHOP QUESTIONNAIRE

Directions: Circle the number of the appropriate response, and write positive or negative comments in the spaces provided.

	Prior to Workshop	After Workshop
1. My understanding of the workshop objectives . . .	fuzzy 1 2 3 4 5 clear	fuzzy 1 2 3 4 5 clear
Comments:		
2. My level of participation in this workshop . . .		low 1 2 3 4 5 high
Comments:		
3. My level of comfort with the workhshop atmosphere . . .		low 1 2 3 4 5 high
Comments:		
4. My level of interest in this workshop . . .		low 1 2 3 4 5 high
Comments:		
5. My rating of the trainers' skill based on their performance in this workshop . . .		low 1 2 3 4 5 high
Comments:		
6. My level of satisfaction concerning what I learned . . .		low 1 2 3 4 5 high
Comments:		

Trainer's Manual: Career Education and Planning Skills. MSSD/NTID National Project on Career Education, 1980.

NPCE

National Project on Career Education

A Joint Project of the
Model Secondary School for the Deaf and
the National Technical Institute for the Deaf

CONTENT TEST

Career Education/Planning Skills

Select the best answer by circling the letter of the word or phrase following each item that best completes the sentence.

1. **The major problem for disabled individuals capable and interested in working is**
    - a) employment legislation
    - b) inability to get needed skills
    - c) lack of successful experiences
    - d) underemployment
2. **It is most important to include which of the following on a school's career education team?**
    - a) librarians and teachers
    - b) counselors and administrators
    - c) teachers and administrators
    - d) teachers and counselors
3. **A major condition affecting member satisfaction in decision-making groups is**
    - a) resolving differences in status
    - b) open-ended goals
    - c) increasing work group memberships
    - d) all of the above
4. **Part of realistic goal setting involves which of the following**
    - a) identification of informal power within the community
    - b) identification of formal power within the school
    - c) personal assessment of needs
    - d) all of the above
5. **Incentives of implementing career education include**
    - a) specific scheduling of time
    - b) status gains
    - c) short range student benefits
    - d) a voucher system
6. **When compared to normal-hearing individuals, career development of hearing-impaired people**
    - a) is restricted to certain skill areas
    - b) is an identical process
    - c) follows the same general patterns
    - d) relies upon special intervention
7. **Jobs in the labor force can be labeled according to their work orientation which includes**
    - a) facts and observations about the work
    - b) individuals and groups of people involved in the work
    - c) situations and effects related to the work
    - d) all of the above

8. The main difference between career education and vocational education is

a) vocational education includes occupational and career education
b) vocational education is included within career education
c) there is very little difference between them
d) none of the above

9. A problem-solving orientation to conflict reflects the view that conflicts are

a) easily solved
b) natural events
c) can be avoided
d) openly expressed

10. A good career education advisory committee should include representatives from

a) school professionals, families and employers
b) employers, families, and teachers
c) parents, teachers, and students
d) teachers, administrators, and parents

11. "Infusion" ot career education is better than "add-on" because it

a) allows for developmental learning
b) requires greater inservice training
c) lets students see the uniqueness of career education
d) involves a limited number of staff

12. Developmental stages of career education include all of the following, except

a) exploration
b) self-direction
c) preparation
d) awareness

13. Career education evolved to address several needs that were not already being met in the schools. These included all of the following, except

a) college preparation
b) student motivation
c) school-community cooperation
d) curriculum relevance

14. The main difference between career development and career education is that

a) career education is a subset of career development
b) career education is a subset of career education
c) there really is no difference between them
d) none of the above

15. Resistance to change can be minimized through

a) stressing career education as a remedy
b) missionary zeal
c) providing psychological support
d) a system of performance rewards

16. Tasks appropriate for the developmental stage of exploration include

a) the identification of different jobs
b) learning trade skills
c) learning what a career is
d) comparing work conditions for certain jobs

17. Generally, the perceptions of educators of the deaf toward career education goals have been

a) uninformed
b) antagonistic
c) skeptical
d) supportive

18. Given the career education element of career awareness, a teacher planned an activity for students to study the sequence of jobs involved in building a house and to note the occupational titles of workers on these jobs. This activity is an example of

a) a construction activity
b) an add-on activity
c) an infused activity
d) a community activity

19. Generally, people work for all of the following reasons, except to

a) satisfy personal interests
b) develop an avocation
c) implement personal beliefs
d) attain social status

20. The performance of change is insured and becomes internalized when

a) monies are budgeted for the new activities
b) mandated by the voting public
c) generated from within a school
d) change agents design new programs

Roadmap of Content and Modules

I. These modules provide administrators, teachers and counselors with basic career education background. New concepts include stereotyping, infusion of the CCEM model and collaboration with community programs.

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I	Modules 1 - 7	**Career Education**
II	Modules 8 - 11	**Planning**
III	Modules 12 - 15	A **Implementation** B **Career Education**
IV	Modules 16 - 18	**Implementation**

Module 1: INTRODUCTION

Prior to teaching the workshop and especially in preparation for Module 1, it is recommended that the trainers review the 3/4 inch cassette tapes on Technical Signs in Career Education. The signs demonstrated in the tape (See word list below) represent a national consensus for the signs for the terms used in the workshop. However, other signs may be used if the trainers feel that the identified sign would not be appropriate.

NPCE WORD LISTS FOR SIGN LANGUAGE TAPES

List #1
CCEM Model Terms

1. awareness
2. self awareness
3. educational awareness
4. economic awareness
5. career awareness
6. exploration
7. beginning competency
8. decision making
9. attitude
10. appreciation
11. preparation
12. employability skills
13. specialization
14. career development
15. career education
16. career guidance
17. vocational education
18. academic education
19. stages
20. elements
21. continuum

List #2
General and Career Education Terms

1. values
2. stereotyping
3. barrier
4. self generating
5. work orientation
6. work function
7. cluster
8. leisure time
9. job
10. work
11. employment
12. environments
13. data
14. collaborate
15. cooperate
16. integrate
17. infusion
18. mobility
19. discriminate
20. role model

NPCE WORD LISTS FOR SIGN LANGUAGE TAPES

List #3
Planning Terms

1. goal
2. setting
3. implement
4. motivate
5. motivation
6. incentive
7. needs
8. analysis, assessment
9. process
10. power (strength)
11. resist
12. resources
13. support
14. systematic
15. task analysis
16. technical
17. assistance
18. network

List #4
Workshop Process Terms

1. censure
2. consultant
3. content bridge (connection)
4. experiential
5. facilitate
6. feedback
7. group dynamics
8. hospitality
9. ice breaker
10. inclusion
11. introduction
12. test, inventory
13. module
14. regional
15. risk taking
16. score (verb)
17. score (noun)
18. meeting, session
19. state
20. strategy
21. survey
22. system

The time for sharing of program descriptions is flexible. Trainers may wish to contribute a description of their CE programs also. Materials may be set up on display for participants to observe after the formal sharing time.

Module 2: SELF AWARENESS

It is important during the processing questions that the trainer not belabor the obvious connection between values, self awareness and career development. The time for sharing among programs should be used to full advantage.

Trainer background could be provided by readings in the literature on self concept development and the psychology of careers, eg. Super, D.E. The Psychology of Careers. New York: Harper, 1957.

Module 3: BARRIERS

If the trainer who is presenting this module is hearing impaired, a hearing cofacilitator should run the movie projector to facilitate controlling the stops at the correct times.

Module 4: USING THE SAME LANGUAGE

The use of specific terminology within a field, or within an institution, facilitates communication. In Module 4 closure should be reached on the meaning of several terms of high utility in the field of career education.

Several terms have presented difficulty, especially to participants who already have basic knowledge of career education and pre-existing definitions. It is important to assure them that their definitions aren't "wrong," but if they continue to use definitions different from the NPCE use, a communication gap may exist.

Career Development vs. Human Development

The U.S. Office of Career Education provides a uniquely broad definition for career development. While it doesn't include leisure or coping behaviors, or involuntary acts (like breathing!), it does include almost all conscious efforts accomplished on a daily basis. Thus, even feeding the dog and making one's bed become part of career development.

Job vs. Career

This activity in Module 4 requires participants to distinguish job from career to establish a value to the career label. Woman's work has typically (and stereotypically) been labeled "job." The broader definition of career provided by Hoyt appropriately encompasses more of the work done by both males and females.

Challenging the Definitions

There may be participants in the audience who refuse to accept the definitions provided in Module 4, or who see the activities as boring and a waste of time. The best a trainer can do is to acknowledge the differences in definitions, without censoring the challenges or implying that they are wrong. The time spent clarifying these definitions early in the workshop will reap dividends later when team members must communicate with each other and with the trainers.

The reading selection which follows was prepared to meet the demand of the CE facilitators trained in the Fall, 1979 regional workshops. The reading provides indepth review of basic career education theory, and was adapted from the CEC publication, "Expanding Work Options for Exceptional Students: A Self-Instructional Manual" by Carole M. Johnson.

REVIEW OF CE THEORY*

Objectives

As a result of completing this reading you will be able to:

- Relate career education to its theoretical foundations in career development.
- Select a personally useful definition of career education.

* Adapted from Expanding Work Options for Exceptional Students: A Self-Instructional Manual, Carole M. Johnson. CEC, Reston, VA, 1979.

Module 4: TALKING THE SAME LANGUAGE

Introduction

In this section, you will acquire a deeper understanding of the career education concept, its basic foundations, and applications. Fundamental to this concept is the definition of work. Within career education, "work" is defined in a broad context. Hoyt (1975) states:

> Work is conscious effort, other than that involved in activities whose primary purpose is either coping or relaxation, aimed at producing benefits for oneself and/or for oneself and others. This definition, which includes both paid and unpaid work, speaks to the survival need of society for productivity. It also speaks to the personal need of all individuals to find meaning in their lives through their accomplishments. (p. 5)

This definition of work expresses the need for people to engage in personally meaningful, productive activity. It goes beyond a definition of work as a job or occupation. Furthermore, because of its emphasis upon productivity and personal accomplishment, it relates to activities in which people engage whether or not they are paid to perform them. Such activities include those encountered in personal, social, and daily living aspects of life.

Theoretical Foundations

Most adults who have lived well adjusted, meaningful, and satisfying work lives, whether handicapped or nonhandicapped, have experienced developmental processes which are by nature sequential and ordered. These developmental processes occur naturally throughout the life of any individual and are facilitated by experiences both within and outside the formal educational setting. The developmental process which relates to an individual's interactions with the world of work is called career development (Bailey & Stadt, 1973).

Career education is a concept which encourages and supports the career development process in a systematic, sequential, and ordered fashion. Career development, then, gains curricular definition through the learning experiences or phases of career education, recognizing that the developmental tasks encountered by individuals differ in each stage of their lives.

The process of ____________

________________________ is

facilitated by the learning

experiences provided through

__________ ______________.

Two Theories of Career Development

Ginzberg's theory

Ginzberg, Ginsburg, Axelrad, and Herma (1951) have proposed a theory of vocational development in which vocational choice is perceived as a process involving three periods--fantasy, tentative, and realistic.

Ginzberg et al. propose the following developmental stages related to vocational choice:

-
-
-

During the fantasy period, which most often occurs during early childhood, children make choices that have no rational or realistic basis, but are fantasies drawn from environmental influences.

During the tentative period, individuals begin to recognize their own interests and their abilities to perform certain activities better than others. They also find they attach more value to certain activities. They begin to fit these together into an overall pattern of interests, abilities, and values and apply them to the concept of career choice.

The realistic period is comprised of three stages--exploration, crystallization, and specification. During the exploration stage, the individual is involved in implementing tentative choices or exploring a variety of activities. Usually this person is at the entry job level or college level of education. At this point, individuals evaluate their vocationally related experiences in a more realistic way and begin to establish a pattern of career choice. Crystallization has occurred when the individual is ready to select or specify a particular career path.

According to Ginzberg et al., the process of career development occurs over a period of approximately ten to fifteen years, and ultimately consists of a number of compromises between an individual's desires and opportunities. In addition, it is recognized that some individuals do not progress beyond a certain point in their development. Biological, psychological, and environmental

(Refer to your CAREER SELF-ANALYSIS.) Were your early career choices realistic for you?

Did your career choices change as you learned more about yourself and the world of work?

When did your career pattern emerge?

factors all affect the individual's progress. These researchers maintain that four factors which generally emerge during adolescence are crucial to the development of stable career plans:

- opportunities for reality testing
- timing
- ability to accept delayed reinforcement
- ability to make and adjust to compromise

Adult role models are also seen as contributing significantly to the vocational choice of younger individuals.

Did anyone influence your career choice?

Who? How?

Super's theory

Super (1957) has divided the process of career development into five life stages:

- growth
- exploration
- establishment
- maintenance
- decline

List Super's five stages of career development:

●
●
●
●
●

During the growth stage, the focus is upon physical and psychological development. At this time the individual forms attitudes and adopts behavioral mechanisms that will ultimately become primary ingredients in the formation of self-concept. Simultaneously, the individual is compiling experiences that provide a background of knowledge of the world of work and the information that will ultimately be used in making tentative career choices and final career decisions.

During the exploratory stage, individuals begin to become aware of occupations as potential components of their lives. In the early parts of the exploratory stage, a variety of occupational choices are frequently expressed. For example, we have all heard children express the desire to be a firefighter one day, the next day a police officer or doctor, the next a teacher or truck driver. Ideas about what one wants to be change rapidly and frequently. Even adults fantasize about those careers that they would some day like to pursue.

When did you start thinking about work as a potential part of your life?

During this stage, however, choices are somewhat unrealistic in that individuals make no attempt to compare what they really want to do, what they are capable of doing, and what opportunities are available. Individuals also begin to explore themselves more fully and to define their capabilities, opportunities, training options, and the kind of lifestyle they would like to live. Toward the end of the exploratory stage, individuals begin to compare themselves with those options and opportunities, attempting to define who they are and what they have the potential to become.

The eleven-year-old who is determined to become a rock star may reflect the ________ characteristics of the exploratory stage.

During the establishment stage, individuals begin to experiment with the various options open to them, as, for example, through part-time work experience. While individuals may accept jobs that they decide are not appropriate as long-range choices, experiences gained through these work activities help direct them toward future career decisions. Toward the end of this stage, individuals begin to internalize components of an occupation as part of their self-concepts and to view their chosen careers as an avenue for obtaining and achieving some of the satisfactions that are important to them.

Did you have any part-time work experiences? ________

During the maintenance stage, individuals attempt to select personally satisfying aspects of a given career and to eliminate those aspects that are negative. Individuals may change or revise their particular work situation in order to bring it more fully into balance with their self-concepts, needs, and desires.

Have you ever changed occupations? ____________

Why? ____________________

____

____

During the decline stage, an individual's emphasis on work is toward retaining employment. This is the period of one's work life when one may leave the work force or the world of work. This is not to say that a person who is retired does not work or that all work is paid employment, but rather that one's established pattern is broken and perhaps new avenues are now open to be explored.

One of the major constructs or assumptions underlying Super's theory is that individuals will find greater satisfaction if they are able to implement their self-concepts through career choice. Self-concept and its development are therefore central to Super's theory and are seen as critical factors in career development. According to Super, each person attempts to maintain or enhance a favorable self concept. Thus, activities are selected that permit the individual to maintain or improve his or her self-image. This is not an easy or smooth process, since restricting factors are encountered that may be based on personal or environmental limitations. Self-concept evolves as a result of individual experiences and perceptions of significant of significant others' actions, reactions, and expectations over a long period of time. Because career choice is so entwined with self-concept, it changes and finds redirection as self-concept develops.

The extent to which one has the opportunity to learn about a variety of occupations also influences career choice. With wider exposure to a variety of occupations comes greater opportunity to compare those occupations with one's self-concept. Individuals also compare their perceptions of others' opinions of them (family, teachers, peer group, and others) with various occupational roles.

The relationship between

__________________ and

________________ _____________

is a critical element in Super's theory.

Knowledge of a wide variety of occupations can be provided through

____

experiences.

Career development, then, involves, defining one's self in relation to the world of work and making decisions based upon that definition or knowledge. Naturally, individuals vary in the extent to which they can make, express, or act upon a personal definition of self in relation to work. Students can be assisted in maximizing their potential for achieving that definition if they are provided with experiences which aid them in gaining knowledge of themselves and the world of work. Because we as teachers have such tremendous opportunity to assist our students in gaining such knowledge, we need to provide them with the experiences to do so.

Career education, when applied to the teaching/learning process, offers a means for assisting students in their career development. The constructs related to the nature of career development and which underlie the career education concept have been synthesized by Bailey and Stadt (1973):

1. Career development is one aspect of an individual's overal pattern of growth and learning.
2. Career development is a long-term evolutionary process, beginning in infancy and extending through adulthood.

The factor of individual _____________________ is included in the concept of career education.

Career education experiences can assist in what aspects of career development?

-
-

313

312

3. Career development is the summation of a complex series of career related decisions made by the individual over a considerable span of time.

4. An individual's striving to arrive at an appropriate occupational goal may be interpreted as an attempt to implement his or her self-concept.

5. Career development proceeds through a series of (primarily) culturally induced developmental periods or life stages.

6. Each developmental life stage involves meeting and coping with increasingly complex developmental tasks. The developmental tasks are susceptible to further description and elaboration.

7. Development through the life stages can be guided. The knowledge, skills, attitudes, and motivation essential for coping with the developmental tasks can be fostered and developed. Career decision-making can be done on rational bases.

8. The degree of mastery of a developmental task and the quality of an occupational decision is a function of the type, amount, and validity of data and experiences to which the individual has been exposed. (pp. 348-349)

Hasn't preparation for the world of work always been a goal of education? To a certain degree, yes.

- In 1913, the National Education Association (NEA) identified vocation as one of the seven cardinal principles of education, along with health, fundamental processes, home membership, citizenship, use of leisure, and ethical character.
- In 1938, the Education Policies Commission of NEA identified economic efficiency as one objective of education.

Paraphrase four (4) of the constructs related to the nature of career development:

•

•

•

•

- The 1944 NEA Commission further stated that all youth need salable skills and positive attitudes toward work.
- The 1961 NEA Commission specified the development of rational thinking as critical to vocational competence. (Goldhammer & Taylor, 1972)

All of these Commissions recognized to various degrees the relationship between education and eventual participation in the world of work. However, it was not until 1971 that the pervasive nature of this relationship began to be recognized. At that time, U.S. Commissioner of Education Dr. Sidney Marland issued his Career Education Now speech. In that speech, Marland proposed:

> . . .that a universal goal of American education, starting now, be this: that every young person completing our school program at grade twelve be ready to enter higher education or to enter useful and rewarding employment.

The intimate relationship between ________________ and _____________ has been more fully recognized in recent years.

Why has it become necessary to call for reforms in school programs that more clearly emphasize the strong relationship between education and work? Hoyt (1975) answers this question clearly in his specification of conditions that point to the need for such reform. Several of these criticisms specify:

- Too many persons leaving our educational system are deficient in the basic academic skills required for adaptability in today's rapidly changing society.

> - Too many students fail to see meaningful relationships between what they are being asked to learn in school and what they will do when they leave the educational system. This is true of both those who remain to graduate and those who drop out of the educational system.
>
> - Too many persons leave our educational system at both the secondary and collegiate levels unequipped with the vocational skills, the self-understanding and career decision-making skills, or the work attitudes that are essential for making a successful transition from school to work.
>
> - The growing need for and presence of women in the work force has not been reflected adequately in either the educational or the career options typically pictured for girls enrolled in our educational system.
>
> - Insufficient attention has been given to learning opportunities that exist outside the structure of formal education and are increasingly needed by both youth and adults in our society.
>
> - American education, as currently structured, does not adequately meet the needs of minority or economically disadvantaged persons in our society. (pp. 1, 2)

Thus, Hoyt states that career education is perceived by many to be a common element which can respond to these criticisms.

> Each of the . . . criticisms cited centers on relationships between education and lifestyles of individuals. Any comprehensive program of educational reform designed to answer such criticisms must be based on some common element inherent in each of them. Such a common element must be one that can logically be related to the needs of all persons involved in education. It must be related to the societal goals for education as well as to the individual personal growth goals of learners. (p. 2)

List three (3) conditions which call for reform in education.

•

•

•

Which of the conditions cited as needing reform have been of professional concern to you?

•

The need for reform in both general and vocational education has also been emphasized in recent reviews of a number of studies of American secondary education (Passow, May, 1975; Passow, December, 1975; Bruce et al., 1976; and Copa, 1976). Each of these studies indicates a need for greater correlation between schooling and the world of work, additional educational options for youth, expanded work experiences, and extended educational experiences beyond the walls of the school.

Definitions

Since the early days of the career education movement, various individuals and groups have sought to define the concept clearly. Listed below are several of the many definitions that have been proposed:

- Career Education can be defined as an effort aimed at refocusing American education and the actions of the broader community in ways that will help individuals acquire and utilize the knowledge, skills, and attitudes necessary for each to make work a meaningful, productive, and satisfying part of his or her way of living.

  (K. B. Hoyt, 1975, p. 5)

- 'Career education' . . . means the totality of experiences, which are designed to be free of bias and stereotyping on account of race, sex, age, economic status, or handicap, through which one learns about, and prepares to engage in, work as part of his or her way of living, and through which he or she relates work values to other life roles and choices (such as family life).

  (U.S. Congress, P.L. 95-207, Dec. 13, 1977)

Identify the central theme in each of these definitions:

Hoyt:

U.S. Congress:

Bailey:

- Career education refers to educational programs and curriculums at many different developmental levels, and provided by several types of delivery systems, which provide experiences designed to help individuals become oriented to, select, prepare for, enter, become established, and advance in an individually satisfying and productive career. Basic to the concept of career education is the recognition that preparation for a career role must begin in early childhood if the individual is to develop the concepts, attitudes and skills which insure freedom of choice and expand career options. Career education eliminates artifical distinctions between 'general' and 'vocational' education by fusing the two in a manner which enables the student to better solve personal, social, and career related problems.

  (Bailey & Stadt, 1973, pp. 346-347)

Brolin:

- Career education is the process of systematically coordinating all school, family, and community components to facilitate each individual's potential for economic, social, and personal fulfillment.

  (Brolin, in Brolin, McKay, & West, 1978, p. 1)

These definitions differ in the extent to which they include or exclude various factors and goals. However, they also have several common emphases. These commonalities include emphasis upon:

- Individual needs
- Developmental processes
- Work
- Community involvement

- o Expanding options
- o Preparation for adult life

In Module 4 of "Career Education/Planning Skills" Workshop you will have an opportunity do present a few standard definitions to facilitate communication among the personnel in your program.

Career Education and Educational Programs

Frequently, the question arises as to the ways in which career education differs from vocational education and from elementary and secondary general and special education. Figure 2 on pp. 16-17 expresses these differences along eleven major characteristics. Although vocational education, general education, and special education have considerable differences in terms of intent, approach, and methods, it is also clear that when career education is applied within each, an intimate relationship exists among them. Since career education is not taught as a separate course or program, it should be thought of as a focus within general, special, and vocational education programs, with educators in each field implementing career education concepts within their existing programs. Career education is thus viewed as an assential facet of all educational programs.

The concept of career education is blended into all instructional areas. Far from causing these areas to lose their identity or purpose, career education enhances them by relating that which is learned through

Do you perceive additional common emphases? If so, list them here.

Is career education offered as a separate course? _____yes____no

Why or why not?

the school to those behaviors, attitudes, and general skills needed in work and daily living. Furthermore, career education, as with career development, can be thought of as continuous. Individuals are continuously becoming aware of career options which they may or may not choose to explore. If those options are explored, individuals may or may not choose to alter their career paths by preparing for new career roles. Thus, individuals are continually making decisions about their career choices and life roles.

Are there any careers you, as an adult, would like to explore? If so, what are they?

325

326

FIGURE 2

COMPARATIVE APPROACHES TO EDUCATIONAL PROGRAMS

CHARACTERISTICS	CAREER EDUCATION	VOCATIONAL EDUCATION	academic EDUCATION	SPECIAL EDUCATION
Populations served	All students at all educational levels, K-Adult	14 and older in secondary and postsecondary schools with specified career objectives; in specifically organized programs below B.A. level	Most elementary and secondary students	Handicapped children and youth identified in accordance with state standards; gifted/talented children and youth according to state legislation or local policy
Teachers	All are involved	Vocational education certified or service area certified	Certified in specific subject matter areas	Specially certified
Counselors	Intimately involved in all areas	Primarily as related to placement, follow-up, personal-vocational	Primarily as related to personal and academic	Some related to placement and personal, often through Vocational Rehabilitation
Curriculum	Integration into existing curriculum: includes occupational information; job acquisition and retention skills; attitudes; decision-making; academic skills; work habits; career planning skills	Skill training with related class based on community input and manpower needs	Emphasizes academic; based on tradition	Self-help, academic, prevocational
Classroom organization	Encourages flexible schedule for work experience, rotation, field trips; encourages individualization	Developed to be primarily self-contained; many include work experience component	Generally confined to traditional classroom	Varies based on needs of the child
Instruction	Promotes individualization	Combines individualized with group	May combine individualized with group	Individualized
Evaluation of students	Performance-based	Performance-based--skill class/may be norm-referenced in related classes	Mainly norm-referenced with some exceptions	Performance-based
Work emphasis	Application of subject matter to future careers; work habits; occupational opportunities; personal/social values; attitudes;	Skill training/work habits/attitudes for entry into a specific occupation or cluster of closely related occupations	Low emphasis	Work adjustment, attitudes and habits; work experience; job acquisition and retention; most often at secondary level; low emphasis at elementary

COMPARATIVE APPROACHES TO EDUCATIONAL PROGRAMS

CHARACTERISTICS	CAREER EDUCATION	VOCATIONAL EDUCATION	academic EDUCATION	SPECIAL EDUCATION
	lifestyle offered; job acquisition skills; job requirements; mobility afforded; need for adapting to change; career planning and decision-making			
Leisure/ Avocational	Emphasizes constructive use of leisure: lifestyle, opportunities and options available, social interaction, how avocation could lead to vocation	Low - growing through youth groups	Some emphasis: reading for pleasure; electives; drama; art; music; sports; extra-curricular activities; development of skills for hobbies	Some emphasis
Employment	Paid and non-paid exploration	Primarily paid, although non-paid also considered in some programs	Low emphasis	Paid and non-paid
Community involvement	Intensive, through collaboration - includes business, industry, labor, government, civic organizations, parents, students	Primarily only those who are directly involved in the occupation for which training is provided, including business, industry, and labor	Low emphasis	Primarily work experience related and involvement of community agencies (e.g. Vocational Rehabilitation) and parents in providing service

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Module 5: The CCEM

To prepare participants for skill development in the infusion process, Module 5 content provides a basis for classifying academic and vocational objectives and designing a comprehensive career education curriculum.

Enthusiasm and high energy are required to learn the elements of the matrix. One effective "energizer," derived from leadership training and used successfully with this module is the statement below. The trainer asks participants to stand and then recites the statement once, signing and speaking slowly. Then the participants are asked to join in the recitation. Repeat the statement at least five times, building speed and volume and resolve with each repetition. Here is the statement:

> I can't lose! Why? I'll tell you why--because I have faith, courage, and enthusiasm!

The metaphor to be applied here is that a theoretical model (or matrix) may seem abstract or fuzzy. With high self concept (derived partially from the statement) and concentration (a spin off of the vigorous signing & shouting), theory should become more concrete, understandable and relevant.

The meaning of the term "matrix," may need to be clarified as a 3-dimensional grid. The dimensions represent what students learn (the 8 elements), where they learn it (the environments) and when the learning takes place (the stages).

The CCEM (Comprehensive Career Education Matrix) as advocated by the U.S. Office of Education, has been used for curriculum development efforts in programs for hearing students since 1972. In addition, the Kendall Demonstration Elementary School (KDES) and the Model Secondary School for the Deaf (MSSD) have used the CCEM as the basis for their career education materials development efforts. These materials should be available on display for participants to view as examples of an application of the CCEM which has been successfully used with deaf students.

In teaching Module 5, it is important to present the stages, environments and elements in depth adequate for participants to reach an application level of cognition. They will practice in their school teams to distinguish among the elements and stages. Although they may not all reach 100 percent consensus, the practice experience will enable them to "finer tune" their definitions and enable them to recognize and classify objectives in their own curriculum.

Frustration may develop if participants struggle to distinguish the elements and stages and are subsequently informed that they are "wrong." Actually, a well reasoned answer with supporting rationale based on experience within their own program is more to be valued (and praised!) than the "right" answer which agrees with the key. These variant answers, within reason, should be accepted by the trainer. Explain that participants will feel less frustrated working with familiar objectives from their own curriculum.

Rationale for keyed answers.

Task 1 represents exploration because the students will "look up and compare" the data, a kind of manipulation which exceeds merely passively knowing about it. It is obviously economic awareness because "wages" are an economic concern.

Task 2 represents awareness because passive knowing and repeating of information is involved. Job titles are always classified as career awareness, the most traditional and commonly taught element of career education.

Task 3 represents specialization since the job application is for the student's major area. The element is employability skills. There is an hierarchical relationship which must be clarified between employability skills and beginning competency, the other option which may be selected by participants for Task 3. Beginning competency refers to awareness of skills and mastery of basic skills which are general to all education. Basic reading, writing and math skills are all at the beginning competency level. Filling out a real application involves mastery for technical expertise in the skill area. If this task were for a class learning how to fill out applications and a hypothetical application blank were used, then beginning competency would be correct.

Task 4 is at the exploration stage, for a beginner still trying out a variety of choices with a lot of guidance (from the guidelines). The element is decision making because choice is involved.

Task 5 is the preparation stage since the student is still "learning." The element is beginning competency, since driving a car is a skill (in the things work orientation) which most teenagers will acquire quickly and thus become competent but not necessarily so competent that they choose it for a career. Most of us may never get past the beginning competency level, unless we are in an occupation involving driving for a full day's work.

More practice

It is assumed that all facilitators on the CE team have been working with others in a variety of curriculum efforts and are thoroughly familiar with the model and how to apply it. One suggestion for further practice is to review the "Curriculum Samples for the CCEM" (HO-5-3) and select a few sample objectives for debate among your career education facilitation team. You may find that debating the rationale among yourselves will force constant references to the definitions as they appear in Vic Galloway's paper, "Overview of a Career Development Model," which is used as a pre-workshop reading.

If you find you still are unsure of the classification of some objectives, you may call the project coordinator for verification. However, it it probably most appropriate to leave the final decision on element or stage up to the teacher who is most familiar with the content and the intention of the objective.

It is recommended that the presentation of Modules 5 and 6 be given by the same trainer. This will ensure that the inevitable overlap of infusion and the CCEM content will be handled by someone with expertise in both areas.

Module 6: INFUSION

Selling career education to all teachers is a challenge. Kenneth Hoyt, Director of the U.S. Office of Career Education believes 15% of the teachers will be enthusiastic and try to infuse career education concepts without looking for any incentives and without specialized training. Another 15% will likely not be turned on, even with workshops, incentives or administrative commitment. Eventually, they may see it is in their own interest to use career education concepts, but their resistance to change will be enduring.

The majority of teachers, and administrators also, need some inspiration, a good reason for change. With a thorough understanding of career education concepts, a motivating workshop experience where teachers can share their strategies and successes, and with administrative support, the remaining 70% will be convinced that they too can and should infuse career education concepts into their content.

For more information on how to inspire teachers, read the following monographs which are available at minimal cost from U.S. Government Printing Office, Washington, DC 20402:

1. "K-12 Classroom Teachers and Career Education: The Beautiful People" by Kenneth B. Hoyt. (Stock #017-080-01537-4).
2. "Teachers and Career Education" by Kenneth B. Hoyt. (Stock #017-080-01618-4).

Sample Script for Infusion Lecturette

The script below shows how a trainer may develop an appropriate lecturette based on the points covered in the narrative of Module 6, Section C. This script should NOT be read but should be studied prior to presenting the lecturette in Module 6.

Sample Script for Infusion Lecturette:

T-6-2

- One of the more controversial and least agreed upon ideas in career education is that of infusion. The dictionary indicates that "infusion implies a pouring in of something that gives new life or significance."
- Educational proponents tend to use the term when a particular idea (in this case a career development concept) is woven right into or taught along side a regular curriculum topic or when a real world experience is used to demonstrate the relevance of a currently taught curriculum topic. Some people say if career education is infused, it cannot be distinguished. But usually the career criteria that have been woven into the curriculum can be identified. So in the real sense of the term it has really not been infused to the point of nonrecognition.
- It is felt, however, that the infused approach allows daily exposure to career development concepts, thus bringing increased relevance to the other basic topics taught in the regular curriculum and having longer lasting effects.

- Many educators were already doing this long before the term "career education" was coined.
- Most career education practitioners use the term "add-on" to mean a separate course or total unit devoted entirely to a career development concept. In some cases this is appropriately done. The real key is not whether the career education concept is infused or added-on, but that students should leave with the desired outcomes.
- Obviously, the add-on approach is easier, but weaving the concepts into all learning activities as a regular part of daily lessons is the ideal.
- When offered as an "add-on," curriculum decisions need to be made as to what to delete in an already over-crowded curriculum.
- Dr. Kenneth Hoyt (1977, pp. 223), Director of the U.S. Office of Career Education discusses infusion: "Most career education advocates have recommended that skills, knowledges, and attitudes students receive as a result of the career education effort should not be packaged in a formal career education

'course' or series of courses. Instead, the common recommendation is that they be 'infused,' 'threaded,' or 'woven' into the content of existing courses in the curriculum."

- Hoyt points out three basic reasons why this recommendation is made:
- First, career education seeks to refocus the entire education system back to one of its many important goals - that of preparation for work. All educators must have responsibility for this refocus. Career education should also contribute to increases in pupil academic achievement.

  Second, career development skills, knowledge, and attitudes can be effectively and naturally transmitted to students as part of the regular educational process.

  Third, "add-ons" cost more. The public call is to make education cost effective, not to make it more costly.
- Dr. Hoyt describes the rationale behind the infusing/threading/or weaving approach as being that: "Pupils can acquire the skills, knowledges, and attitudes career education

seeks to convey while simultaneously being motivated to learn and to increase the amount of subject matter actually learned."

- You will need to develop skill in recognizing objectives already in your curriculum which are "infused" because the nature of the activities used to teach the objective are connected to the components of the CCEM.

T-6-3

- For example, elementary age deaf students may visit community helpers as part of their social studies curriculum. It will be easy for their teacher to infuse some self awareness "career education" by asking the students if they would like to wear a uniform to work, like a law enforcement officer (cop).
- It isn't necessary to mention a job title with infused activities unless you wish to cover the element, career awareness. Job titles change as they become outdated. Many are also sexist and imply only men or only women could do that work, like "policeman" and "salad girl."

T-6-4

- In math class, deaf eighth graders may choose in which bank to deposit their savings based on the best interest rates. Their teacher is infusing economic awareness, decision-making and beginning competency (working with data), at the exploration stage.

T-6-5
- A comprehensive career education curriculum is developed by first reviewing your content curricula for objectives which are already related to the CCEM and the world of work.
- Then you are ready to tackle the design of new career education objectives to fill in the gaps at each stage.
- You probably won't find any commercially available career education materials which exactly match your needs.
- Writing new objectives from scratch which relate well to your subject area is a challenge requiring skill and in-depth understanding of the content, the CCEM, and your deaf students.
- You will need to practice with your career education team to develop your skill.
- It may be tempting to simply "add-on" the career education content you know your students need.

- The cost of adding-on to your students' schedules and to your school budget must be compared to the costs of redesigning your infused curriculum.
- Teaching is easier when students are turned on by relevent objectives and activities. That's what infusion is all about: weaving relevance and application of their learning through every level of the curriculum.

Planning Your Infused Lesson

The demonstration of a real classroom lesson is the most effective way to distinguish the add-on approach from infusion. Depending on the trainer's content background, a topic should be selected and a simple objective developed with discussion questions, e.g. climate and geography in the U.S. Then infuse one or more of the elements of CE into the content as a second lesson, eg. decide where to look for a job, based on the weather conditions preferred (decision making/self awareness).

Use of the participants as a simulated class of deaf students involves the risk of unanticipated contributions. Bringing in students for the demonstration involves the same risk plus the hassle of setting up the demonstration, recruiting and preparing the students, and dealing with their anxiety of performing for an audience.

One alternative is to videotape a class of students for each lesson (one academic without CE infused, the second infused). The tape should be brief: the photography should be professionally done and communication (signing) should be legible. If a tape is used, be sure to alert the site coordinator to the media needs for playback.

More Examples

Please review the examples below to note how the same content and CE element can be infused in the curriculum at a variety of stages.

EXAMPLE

1. Content: Science
   Stage: Exploration
   Element: Educational Awareness

   Content Objective: To study the various types of plankton in ocean water.

   Career Ed. Objective: To look up the educational requirements of a botanist and learn to use a college catalog.

   Activity: The students will list college courses required for a major in botany using catalogs from local colleges and universities.

2. Content: Science
   Stage: Awareness
   Element: Educational Awareness

   Content Objective: To study chemical impurities in water.

   Career Ed. Objective: To become aware of the educational requirements of a Chemical Lab Technician (or Technologist).

   Activity: The students will observe a pollution experiment demonstrated by a deaf chemical lab technician. They will discuss requirements for an Associate degree in Chemical Lab Technology.

3. **Content:** Science
Stage: Preparation
Element: Educational Awareness

Content Objective: To study chemical impurities in water.

Career Ed. Objectives:

1. To acquire entry level skills for operating a wastewater treatment plant.
2. To gain an understanding of the various avenues for fulfilling the educational requirements for this occupation, such as:
    a. assisting an operator
    b. correspondence schools
    c. AAS programs in some colleges

Activity: The students will:

1. meet with a career counselor to discuss educational requirements for a wastewater treatment plant operator.
2. apply for a summer job in a local plant and ask for information on what inservice training is provided by the plant.

Module 7: COMMUNITY INVOLVEMENT

Before presenting Module 7, it will be necessary to read the trainer narrative and Supplement content for Module 8 in preparation for administrating the "Career Education Needs Assessment," HO-8-1. It may also be helpful if the trainer is available to answer questions related to completing Part I of the "Career Education Needs Assessment" prior to Module 8.

In Module 7, during the lecturette on integration, the trainer should note examples cited by participants to tie in the relevance of CE efforts which they are already implementing in their school, and build on their contributions. If no relevant examples came out during the prior discussion, the trainer should describe examples, such as having a parent, whose job title is meteorologist, take students on a field trip to the local weather bureau as a way of integrating their study of climate, weather maps, etc. with the world of work.

Module 8: SYSTEMATIC PLANNING AND IMPLEMENTATION

Trainer Assignments

One recommendation regarding the scheduling of trainers for Modules 8-11 is to select two cofacilitators for handling all four modules. They may wish to divide the labor so that each is mainly responsible for two out of the four modules. But, because the content is so heavily interdependent, both trainers should be thoroughly familiar with the worksheets and strategies of all four modules.

Transition to Planning

An important delivery skills concept will be implemented in the beginning of Module 8, "transition" or a content bridge between career education and planning skills.

The needs assessment has been structured to correspond to the CCEM model so that participants may apply their comprehension of the elements of the model to student outcomes. Without a model or theoretical base for doing a needs assessment, there may be overlap of areas or gaps which the instrument items fail to cover. The needs assessment instrument should not be used without first assuring complete familiarity with the CCEM model. It may be necessary to help some participants reach a comprehension and application level in focusing on the model. It is helpful to refer participants to the pre-workshop reading, "An Overview of a Career Education Model" by Vic Galloway.

To "bridge" from the career education student outcomes to the planning process requires an internalization of the concept of "need." Hopefully, the graphic T-8-5 showing "need" as a gap between reality and an ideal will make the concept concrete and enable participants to estimate and report on the needs assessment a percentage of achievement.

Identifying the extent to which students have achieved the specific outcomes may be impossible. Participants who cannot use a percentage should be encouraged to use a designation of "high, medium, or low."

The logic of planning as a way of meeting needs fits easily into the context of career education program development. Every proposed change should have a data base. The needs assessment and the other steps in the planning process provide that data base. Career education is the innovation under consideration and fits the planning process very appropriately.

Consulting with the School Teams

The skills involved in consulting will be needed as cofacilitators circulate among the participant school teams. The readings in Sessions B and C of the Delivery Skills Workshop will provide important insight into group dynamics, conflict resolution styles, and blocking behaviors. Review of these materials before serving as a cofacilitator for the modules on planning is essential.

Cofacilitators are reminded also of the need to be unobtrusive, yet available for help and information. A comfortable strategy to use is to circulate among the groups, sitting and joining those which request help. It is strongly urged that cofacilitators sit with groups in which conflict is obvious. Being sensitive to their need for confidentiality, the cofacilitator should observe the interaction and intrude only if the input will facilitate the team work. It is recommended that a cofacilitator not stand, hovering over a group, in an attempt to eavesdrop. A better strategy is simply to ask if you may join them and follow the discussion.

Team development is a vital aspect of the workshop and an important implementation concept. Each team should have a clearly specified leader. If the leader isn't apparent, it would be appropriate to ask, as you join a group, who is serving as their leader.

One function which cofacilitators serve in consulting is a maintenance role. Keeping a sense of humor and perspective in the face of the heavy discussion of each school's problems requires patience and sensitivity.

Depending on the format for the workshop, it may be possible to present the objectives for two consecutive modules and allow the teams to work straight through both modules. For example, Modules 8 and 9 flow together nicely, as do Modules 10 and 11.

Module 9: THE PLANNING PROCESS: NEEDS

The process of analyzing the needs identified by means of a priority rating process serves an important function. If the teams begin with needs which are reasonably easy to address, they will feel a sense of achievement sooner. This can be highly motivating for further effort. In addition, the most urgent and important needs, once addressed, will derive the greatest benefit for students and staff.

A note of caution must be given for those teams which don't finish the complete list of steps in the time provided. The steps represent a process which must be practiced. If the teams complete all steps, they will also have a product; i.e. the high priority needs for their program. It isn't necessary to leave the workshop with all those needs specified. The workshop goal is for participants to learn the process and practice it sufficiently to be able to use it in their home school and implement the steps with other colleagues. A comment to participants may alleviate the frustration resulting from feeling rushed, or not finishing in the allotted time.

Module 14A: ORGANIZING FOR COMMUNITY PARTICIPATION

For the opening icebreaker it is recommended that the trainer read the directions without signing and have the interpreter sign the directions as read. This will be more efficient than trying to keep one's eyes on the manual to follow the lines of print, while signing simultaneously. The interpreter should fingerspell the word rectangle; not mime its shape in the air.

Some signs should be established as the trainer reads, or beforehand with the interpreter, eg. topple, tilt, reference, straight, degree.

For the second design the trainer should begin by reading the directions, but then, as participants start to interrupt with questions, the trainer's responses can be spontaneous in his or her own words. It isn't necessary to re-read exactly unless participants request it.

The metaphor to be made with the one-way vs. two-way communication will depend on the result working out as expected with the second design being more accurate. If some individuals don't get the desired results, be sure to survey the group to establish the results achieved by the majority of participants. Experience with this activity has generally shown better accuracy for design 2 for the majority of participants.

Module 15A: IMPLEMENTING CAREER EDUCATION

An indepth review of planning for the implementation of change must focus on the topic of organizational development (OD). Organizational development is a long-range effort to improve the processes and products of an institution through a systematic analysis of the new goals. A formal work team with the assistance of a change agent can identify needs, establish goals, bring resources to bear and produce change.

Long-range. Since the entire institution or school is the focus for change, improvements cannot be expected overnight. Some programs assume that a minimum of one year, up to perhaps three to five years, will be required to achieve the desired changes. In some instances, it may be possible to institute significant behavior changes in the short run. However, for this to occur, either a) the change effort must be directed at a very small part of the organization, or b) the influence of an external factor must be so strong that it overcomes any "normal" resistance to change. For example, the school or program which has an exceptionally high drop out rate may be more agreeable to change than one not experiencing such a severe problem.

Processes and Products. In implementing a new program in career education, the students and the curriculum represent two products which should show improvement. The curriculum development process must be tied to attempts to infuse career education concepts within content, with attendant activities which facilitate the achievement of both objectives. The student development process must be tied to attempts to infuse career education concepts within content, with attendant activities which facilitate the achievement of both objectives. The student development process must be tied to better teaching and assessment of the gaps in the exit behaviors and skills which students will need as they compete in the job market. Each institution will have its own unique environment which must be analyzed with respect to readiness for change.

Formal Work Teams. Organizational development emphasizes team development. When the cohesive effort and energy inherent in teamwork is capitalized on, resistance to change is more easily overcome. Team development should also facilitate the process of collaboration of units within the institution.

Change Agent. An internal or external consultant, or change agent, can take an active decision-making role or a more passive role as a sounding board or counselor. The NPCE tends to assume the latter role which is consistent with getting the participant schools to help themselves. The two elements of change include the humanistic goal of changing attitudes and motivating the desire for change and the task-oriented goal of improving student outcomes and documenting curriculum.

Support. Many times participants design elaborate plans only to find that they are unable to put them into practice because their superiors have not been exposed to the same learnings. That is why the career education team has an administrator member and also why Step 1, as recommended, is a report back to other administrators. It is also strongly recommended that the superintendent or chief administrative officer for the program sit in on the modules (16-18) dealing with development of goals for the pre-plan. Sensitivity to the impact of the presence of the chief administrator on team progress is recommended. While it is essential that the administrator be cognizant of the plans, it is likely that the interaction will assume a different tone in their presence.

It is strongly recommended that the trainer responsible for presenting Module 15A, also present Module 17 since the outcomes achieved in 15A will impact on the process used in 17. If another trainer is scheduled to present Module 17, a conference should be set up to discuss the results of Module 15A and to decide how to handle the structure of Module 17.

Module 12B: SELF AND CAREER AWARENESS

The two easiest elements in the CCEM are self awareness and career awareness. Frequently, an entire career education program may be developed and never even go beyond these basic elements.

When practicing infusion of these elements within a content area, it is recommended that one of the three later stages be used. An awareness element at the awareness (first) stage represents no challenge to the participants' comprehension of the elements and stages.

One hazard inherent in beginning an in-depth study of infusion using the career awareness element is the common misconception that to be career education, a job title should be included. Point out to participants that in studying self awareness, as exemplified by the infusion of the work habit, "punctuality," no job title needs to be included. The focus is instead on the student's values, typical behavior and experiences.

Another caution concerns the mix of deaf and hearing participants in any fast moving or competitive "games" or ice breakers. Sensitivity to the needs of the deaf participants in trying to keep up with the communication is essential. Remind participants to sign for themselves if they can or to control the speed of their communication for easy interpretation.

Module 14B: BEGINNING COMPETENCY

Rational for use of data, people, things.

This program model* of career education utilizes the system for classifying jobs developed by the United States Department of Labor. The Dictionary of Occupational Titles (D.O.T.) contains 21,741 separate occupational titles. These jobs are classified and coded into nine occupational categories which are further divided into divisions and groups. These nine categories represent an arrangement of work that reflects the field and purpose of each endeavor. This system of job grouping avoids the hierarchical connotations of an older system which categorized work by levels ranging from unskilled to professional. The present system provides for the following nine occupational categories:

Professional, technical, and managerial occupations
Clerical and sales occupations
Service occupations
Farming, fishery, forestry, and related occupations
Processing occupations
Machine trades occupations
Bench work occupations
Structural work occupations
Miscellaneous occupations

This newer system of job classification also provides for determining the degree to which each job is related to working with data, people or things.

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*Munson, H. L., J. C. Egelston and G. B. Phillips. Career Education for Deaf Students: An In-Service Leader's Guide, University of Rochester, 1975.

In each of these areas, a number of work functions have been identified, and the coding of the job indicates the highest appropriate function which is utilized in that job. The work functions associated with working with data, people or things are enumerated below:

Data	People	Things
Synthesizing	Advising	Setting-Up
Coordinating	Negotiating	Precision Working
Analyzing	Instructing	Operating-Controlling
Compiling	Supervising	Driving-Operating
Computing	Amusing	Manipulating
Copying	Persuading	Tending
Comparing	Speaking-Signaling	Feeding-Offbearing
	Serving	Handling
	Helping	

In view of the many jobs and the changing nature of jobs activities, it seems inappropriate to approach career education solely from the informational point of view. Young people could never hope to learn about all the job opportunities that exist. Furthermore, the evolving routines of work activities would soon make much of their learning obsolete. Therefore, this program model emphasizes learning about the three different work orientations and the characteristics of these three groups of jobs. Young people can learn to assess themselves in relation to these work orientations. They can learn to identify the nature of work tasks associated with each. They can use their knowledge of and feelings about these different work orientations in assessing job opportunities and requirements. This type of information should have greater application to all types of job seeking. Furthermore, it should have a longer period of usefulness. Both now and in the future, as they learn about jobs and their activities, students can transfer and apply this information. In this way, the program model caters to the life-long process of evolving a career—a life time of learning about the world of work and the continual nature of choosing where one will participate in it.

For educators of the deaf who are involved in career development activities, the rationale for learning the coding system is the resultant utility of knowing how to use the D.O.T. as a general reference tool. The strategies in this session help participants gain insight into the system of job classification and the need for it, but does NOT require memorization. Availability of the D.O.T. for teachers should provide access to information about jobs and comprehensive descriptions of the work functions concepts.

It is not expected that most deaf students will use the D.O.T. because of its highly technical nature. The concepts and information from the D.O.T. come to the students through their experiences in building beginning competency in the three areas of data, people and things.

Commercially available CE materials based on the approach of data, people, things are available from McKnight publishers (Appalachian Series).

Delivery of Media

Although the media requirements for this module specify a syncronized cassette recorder/filmstrip set up, it is also possible to advance the filmstrip projector manually.

The audio cassette has the same program recorded on both sides to allow the trainer four options for playback.

Options	Tape Side
automatic synchronization using inaudible 1000 hz tone	B
automatic synchronization using audible 1000 hz tone	A
automatic synchronization using audible 50 hz tone (DuKane filmstrip projector)	A
manual advance cued by audible tone	A

If the proper playback equipment is available for automatic synchronization of the filmstrip programs, it should be used. This method is more convenient for the presentor and less distracting for the audience. If synchronized equipment is not available, the filmstrip/tape program can be advanced manually, using the audible advance tones.

In preparing for projection, it is very important to preview the program, whether using the inaudible or audible pulses. All of the projected frames have captions of the narration so that simultaneous projection of the correct frame and audio-tape are assured.

Begin with the black frame immediately following the focus frame. The filmstrip should be advanced to that frame when the cassette tape is started. The program also ends as a black frame.

Module 16: SHARING WHAT YOU'VE LEARNED

Experience Counts

The "Experience Counts" game is a competition where everyone wins. Team members learn about each other and realize the strengths they bring to their career education team with their diverse backgrounds. Individuals recall and clarify the variety of experience which have contributed to their career development.

The choice of prizes should reflect a career education theme but may blend a light touch of humor. Unisex, inexpensive, yet useful prizes which could be awarded are:

butterfly plaque - For someone who has "flitted" from job to job.

coffee mug - For one who had many "breaks" in their career.

box of salt - For one who spent so many years in the "salt mines."

graphic design of a gold watch - For the most experienced participant.

The Superintendents

The attendance of the superintendents is required in the hopes that team planning will be facilitated by the presence of someone with knowledge of resources and the authority to commit them to the career education effort. Plans made without this commitment may never be implemented.

Since the superintendents will be new to the group, they should experience some special inclusion efforts. Arrangements should be made for coffee or other refreshments, and a special greeter. They should receive a workshop brochure, roadmap and name tag and have an opportunity to ask questions before joining the group.

Module 17: PLANNING YOUR PLAN

In this double module all facilitators should be available to consult with the school teams as needed. Review of the group dynamics content in the Delivery Skills Workshop will facilitate recall of conflict resolution and communication skills which may be useful in the consultant role.

Sensitivity to the need for confidentiality regarding political or sensitive issues discussed by the school team should be practiced. Joining one team and sitting with them an entire planning session is to be discouraged. Teams will usually tackle their own implementation plans best if left to work independently, knowing they may ask for help if they bog down.

The resources identified as needed for implementation may be available from the training team and will be negotiated during and after Module 18. At this point, the planning effort should document any resources the team members feel they need.

Module 18: IS THERE LIFE AFTER A WORKSHOP?

The trainer who presents this module must be thoroughly familiar with the resources available from the supporting institution. If assistance is promised which can't be delivered, the teams will be unable to implement their comprehensive CE plans.

It is recommended that workshop follow-up assistance be available for up to two years after the workshop, as needed. The kind of assistance may range from consulting service, training, guest speakers, materials or simply communication network assistance. Keeping people in touch with what other schools, programs or teams are doing is the main goal of the networking effort. In particular, putting schools which need specific expertise in touch with the experienced schools which have a history of success in that particular area will solve most technical assistance needs.

Appendix A

ORIENTATION MATERIALS

1. Workshop Brochure
2. Biographical Form
3. Pre-workshop Readings
4. Sample Cover Letter

CAREER EDUCATION AND PLANNING SKILLS

The NPCE workshop, "Career Education and Planning Skills," consists of 18 modules, designed in 45 minute blocks, which are packaged in a multimedia, experiential format.

The outcomes for the workshop are:

1. Increased Knowledge of career education and awareness of how it is implemented,
2. Increased Skill in planning, using career education content as the vehicle,
3. A Plan of Action for implementing career education in participants' home school, and
4. Experience with some career education activities which may be used with staff and students in the home school.

The workshop content:

Module 1: Introduction (double module)
2: Self Concept
3: Barriers to Career Development
4: Talking the Same Language
5: CCEM Model
6: Infusion
7: Community Involvement
8: Systematic Planning and Implementation
9: Planning: Needs Assessment
10: Planning: Power and Support
11: Planning: Goal Setting/Evaluation

Parallel Sessions

Implementation		Infusion	
Module 12A:	Group Decision Making	Module 12B:	CCEM: Self and Career Awareness
13A:	NGT	13B:	CCEM: Educational/Economic Awareness
14A:	Community Advisory Committee	14B:	CCEM: Beginning Competency
15A:	Systematic Implementation	15B:	Resources

Module 16: Sharing What You've Learned
17: Planning Your Plan (double module)
18: Is there Life After a Workshop?

Contact your workshop site coordinator for more information.

Trainer's Manual: Career Education and Planning Skills. MSSD/NTID National Project on Career Education, 1980.

NPCE

National Project on Career Education

A Joint Project of the
Model Secondary School for the Deaf and
the National Technical Institute for the Deaf

BIOGRAPHICAL FORM

Please complete the
Biographical Form and the
Content Pretests, and
return them immediately to:

Dr. Judy Egelston-Dodd, Coordinator
MSSD/NTID National Project on Career Education
One Lomb Memorial Drive
Rochester, New York 14623

Name ____________________ **Date** ____________________

Mailing Address ____

____

Demographic Data (complete all)

School ____________________ District ____________________

City ____________________ State and Zip ____________________

Total School Enrollment ____________________ Grade Level ____________________

Your Position (check one and complete)

☐ Teacher - primary teaching area ____

☐ Administrator - administrative title ____

☐ Support Staff - area of responsibility ____

Years Experience (complete all)

Total in education ____________________

In present position ____________________

In career education ____________________

In deaf education ____________________

Reason for Registering (check one)

☐ Requested by supervisor

☐ Professional growth

☐ Fulfill inservice requirement

☐ Other (what?) ____________________

Education Level (check 1)

☐ bachelor's degree

☐ credits beyond B.A. ____

☐ master's degree

☐ credits beyond M.A. ____

☐ doctor's degree

☐ credits beyond doctorate ____

Age (check 1)

☐ under 25

☐ 25 - 29

☐ 30 - 39

☐ 40 - 49

☐ 50 - 59

☐ over 59

Sex

☐ Male

☐ Female

Handicap

☐ none

☐ hearing-impaired

☐ other (what?) __________

____

Roommate Preference

____

Interests and Hobbies

____

____

____

____

____

NPCE
National Project on Career Education
A Joint Project of the
Model Secondary School for the Deaf and
the National Technical Institute for the Deaf

PREWORKSHOP READING

Overview of a Career Development Model

Adapted from a presentation by
Dr. Victor H. Galloway,
Former Director, Division of Education, MSSD
Model Secondary School for the Deaf

A general but comprehensive career development model in many ways synthesizes the important components of several available career development models. The result is the multifaceted conceptual model described in this paper.

This model incorporates the major elements of career development and infuses major concepts of career education which focus on those career development elements.

A necessary preamble to this paper must delineate the relationship and distinctions between the terms "career education" and "career development." The major concepts in career education will be briefly summarized. These concepts when overlaid with the career development model will provide a broad base to guide any implementation efforts. Through an understanding of these career development elements and career education concepts within your own unique situation, a career education program may be conceived to assimilate and accommodate existing relationships. Thus your program will be more appropriate for the community for which it was designed.

There will be no effort to differentiate between carer development for hearing impaired individuals and hearing individuals in this paper because there are many more similarities than differences. The end goals of the career development process are no different for the hearing impaired individual. While these similarities represent the rationale for similarities in content, the handicap will demand attention. Deafness, in that it disrupts the normal avenues of communcation, does interfere with the acquisition and compilation of information -both important tasks in the career development process. Also, a hearing impaired individual is isolated from the environment which restricts the natural and casual exposure to types of information and experiences which are necessary to enhance the potential of the individual. Further complications for a hearing impaired individual include: additional criteria that must be considered by the hearing impaired individual as he/she assesses interests, skills and attitudes; on the job communication problems; and internal and external career stereotyping and discrimination. Employment studies have indicated that underemployment, not unemployment, is the major problem facing the deaf worker. It will be through the complete understanding of the career development process and through the design of effective career education infusion strategies that the full potential of the hearing impaired worker will be realized.

Career education emerged as a reform movement, as an effort to revitalize the entire educational system in order to bring relevance and purpose back into education, Career education was and is a response to widespread criticism of and concern for American education. Many educators were concerned that too many persons leaving our school system were deficient in the basic skills necessary to adapt to today's rapidly changing society (Hoyt, 1974). Our labor force contains large numbers of both undereducated and overeducated workers. Many middle-aged workers do not possess the skills needed to cope with mid-life career or life changes. Older workers approaching retirement are unprepared for the drastic life role change that awaits them at retirement.

Our educational system placed too much emphasis on meeting the educational needs of the so-called "college bound." Too many youth were leaving our educational system at both the secondary and college level without the required vocational skills, self-understanding, decision-making skills, and work habits for making a successful transition from school to work. It was in response to these problems that career education emerged as a concept on the American educational scene.

Before discussing the major concepts of career education, it will be important to differentiate career development and career education. Career development is a life-long, person-centered and developmental, decision-making process, which assimilates and integrates the individual's understanding of self and career information and experiences resulting in decisions regarding career and educational alternatives, life styles and role options. Whereas career development refers to the process and developmental stages and the components which influence career and life choices, career education refers to the planned, systematic intervention strategies utilized to attain the goals of the career development process. Dr. Kenneth Hoyt defines career education as:

"total effort of public education and the community to help all individuals become familiar with the values of a work-oriented society, to integrate these values into their lives in such a way that work becomes possible, meaningful, and satisfying to each individual." (Hoyt, 1974)

Career education is much more than vocational education (preparation of employability skills) or the matching of people and jobs. The emphasis of career education is on the development of the individual's ability to make career choices rather than the choices themselves. The intent of career education is to enhance the use of career and life choices made by the individual through systematic program planning to assure that the individual has the skills to assimilate the information and experiences necessary for making decision. The end result will be free and informed career and life choices which reflect consonance with the individual's self identity.

Career education is a comprehensive approach that seeks to achieve its goals by utilizing the resources of the school, home, business-industrial community to break down the artificial barriers which have isolated the world of school from the world of work. It also seeks to eliminate barriers caused by socio-economic conditions, internal and external stereotypes and the unavailability of information which restrict the individual's ability to make decisions.

With this background we can now address the career development model. Career development has been presented as a continuous, lifelong, person-centered, developmental decision making process focused on seeking, obtaining, and processing information and engaging in purposeful planning regarding career and life decisions. The emphasis of career development is the self knowledge and self concept of the individual and the gradual, developmental nature of the personal choice and adjustment process. Career education impacts on this process by facilitating the development of the individual's ability to make career choices, and not necessarily on the quality of the choices themselves.

Eight goals or outcomes of the career development process and eight corresponding elements comprise our career development model (see figure 1). The eight outcomes of the career development process and their related elements are:

Elements

a. Self-awareness
b. Educational awareness
c. Career awareness
d. Economic awareness
e. Decision making
f. Beginning competency
g. Employability skills
h. Attitudes and appreciations

Goals

a. Self-identify
b. Educational identity
c. Career identify
d. Economic understanding
e. Career decisions
f. Employment skills
g. Career placement
h. Self/social fulfillment

The first outcome of **self identity** is attained by involving the student in a planned, sequential process of self-assessment and self-evaluation designed to assist the student to realize who he/she is and what he/she is like. This internalized value system will form the primary construct for the ordering of occupational and educational alternatives. **Self awareness** which leads to self identity involves the recognition of relationships between interests, aptitudes and achievement to attainment of career goals; the individual's relationship to his/her culture; the understanding, acceptance and respect of the individual for his/her own uniqueness; the understanding and recognition of the various forces which shape his/her development. From these and other perspectives on himself/herself the individual develops the self image through which the world is viewed and processed.

The second outcome, **educational identity,** which is attained through **educational awareness,** assumes that the student will develop and refine a thorough understanding of the role of education and training in the changing world in which he/she will one day assume more complete, productive participation. As the student develops this Educational Awareness he/she will combine an understanding of the relationships among education, training, and life roles; knowledge of himself/herself; understanding of his/her learning capacities and styles; and the ability to select and evaluate educational avenues for the development of his/her career plans.

Career awareness which leads to **career identity** involves the understanding of the broad range of careers that serve the society-at-large. The student will learn about the development, growth, behavior, training, life styles, rewards and work conditions of persons engaged in specific occupations. Having achieved this broad understanding, the student should, through active exploration and career experiences, select a personally meaningful role within the world of work.

Economic awareness, the fourth element of the model will lead the student to **economic understanding,** which is defined as the comprehension of the interrelationships that exist between personal, economic, life-style, and career goals. The social and economic benefits associated with various occupations will be known to the student. The influence of money and wealth on life-style and life role will be understood by the student.

The fifth element, **decision making,** is composed of activities, experiences and knowledge that will provide the student with the skills and experience in the rational process of decision making and will result in free and informed life choices. From the individual's earliest movements, he/she is faced with decisions and choices; the individual must understand the process, experience it and learn to accept responsibility for the outcomes. **Life and career decisions** are the end result, but the emphasis is not on the choice made but rather the process used.

Beginning competency, the sixth element rests on the need to provide the student opportunities to use tools and materials from a variety of occupations so that the individual can acquire **employment skills.** (The employment skills may be classified under the three orientations of data, people and things.) Development in this area will contribute to other outcomes such as career identity, self identity, and economic understanding. We are not contending that every student possess marketable employment skills by the time he/she leaves high school in the narrow sense of the term employment skills. The career development process extends beyond high school, and is life-long.

Employability skills are also necessary if an individual is to locate and obtain **career placement.** The youth must not only learn how to locate and apply for a position, but must also develop skills in group participation, work adjustment skills and general social awareness skills. The student must recognize the need for working alone, or with little or no supervision. The student must become skilled at communicating information about himself/herself during the job selection process.

The last element, **attitudes** and **appreciations,** relates somewhat to the first in that the student will develop an internalized value system that includes a respect for his/her own career role and the roles assumed by others. An individual who possesses positive attitudes about his/her career and life roles should be a productive member of society. Through the internalization of a value system that promotes self-actualization the individual will in fact acquire **self/social fulfillment** and which will reflect an inner peace as well as an outer peace in relations with other members of the society.

These eight elements form the nucleus of the career development model. By developing the skills and knowledge of the student in these areas the outcomes can be attained, and the transition from youth to adulthood will occur much more easily.

The model has been, thus far, single dimensional and linear. The eight elements and their corresponding goals have been presented, but not the other essential components and assumptions which contribute to the multifaceted nature of this career development model.

Separation and categorization of the eight elements is artificial and was done for the purpose of highlighting each element. In reality, they are interwoven and interactive in their relationship. Growth in one area influences growth and development in all others. Activities and infusion strategies designed to build positive self concept will have a spillover effect in every area. Again, this model stresses the centrality of the individual and the development of decision-making, self-understanding and information processing skills of the individual. There is no linear sequencing of the elements. There is, however, a sequencing or hierarchial structure to the model.

Being a developmental model, an essential dimension is time. The individual grows or develops over time, with increasing knowledge, skills and abilities. This developmental sequencing of career maturity is naturally distributed throughout the entire model. There is an implied movement from gross or broad concepts, understanding, or abilities to more refined knowledge, complexity, or coordination. Each element becomes more specific, more refined as the student progresses through developmental stages. The student moves from a superficial understanding that there are broad occupational clusters to a more refined knowledge of specific skills and abilities within a single occupation. And the student progresses from an early egocentric view of his/her own role in the world to become one day a self actualized person caring for others and being cared for as the need arises. Our model includes four developmental stages -awareness, exploration, preparation and specialization.

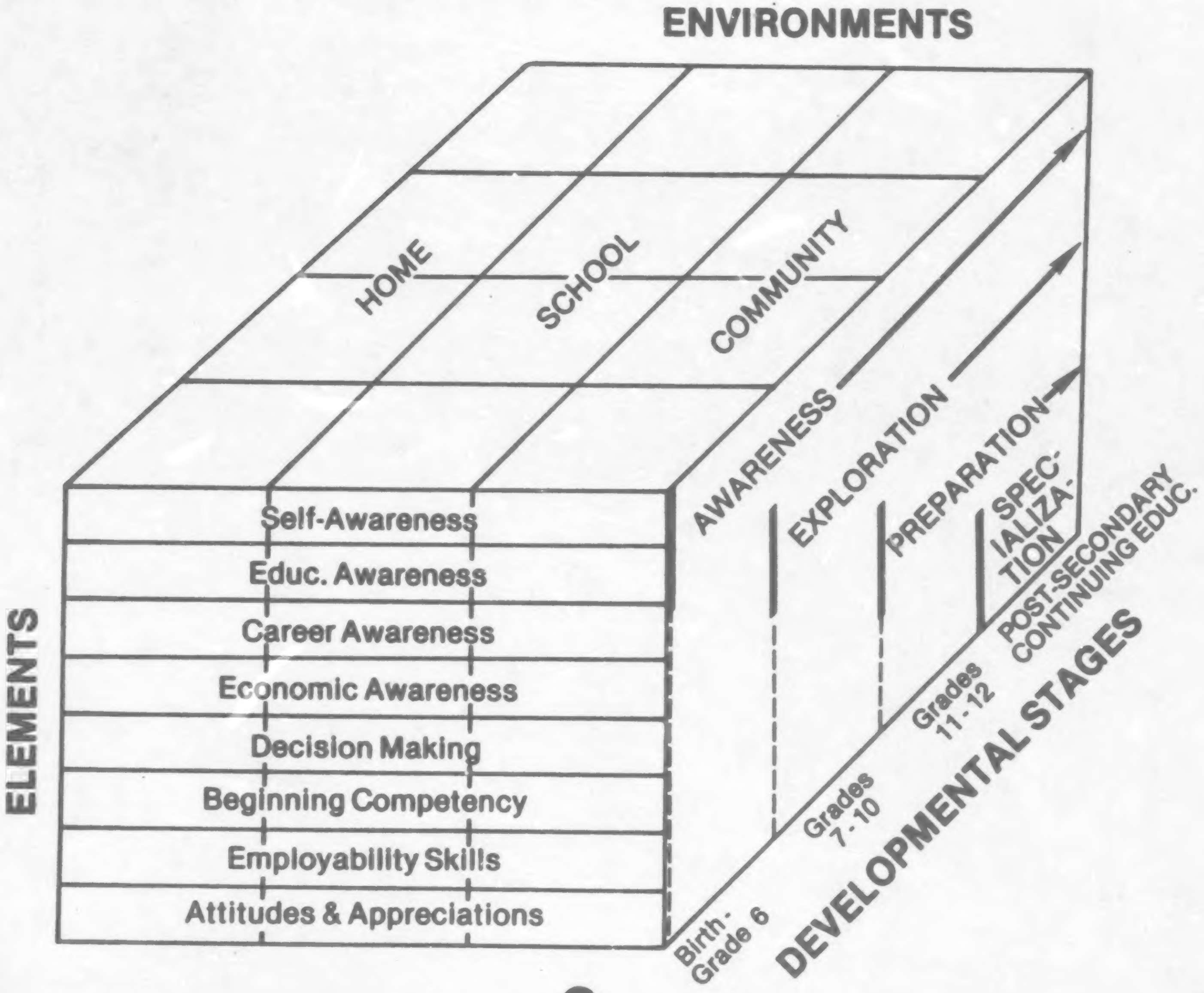
The first stage of **awareness** is a more passive stage involving the compiling, assimilating, and integrating of information and experiences. An example of an early career education goal at the awareness stage for the appreciations and attitudes element would be appreciating the importance of each individual in the functioning of the home unit. A goal for the decision making element at an advanced awareness stage would be to understand the importance of goals in life style decisions.

The second stage, **exploration,** involves the more active interaction of the individual with the environment. The individual is testing and manipulating knowledge, concepts and experiences. An example of a goal for the self-awareness element at this stage would be to relate career choices to the student's interests and abilities. A goal for the element, beginning competency, would be mastery of tools used in homemaking, crafts or construction.

The third stage, **preparation,** refers to the broad development and refinement of certain skills such as academic, decision making and entry level occupational skills in accordance with tentative or final career choices. An example of a goal for the educational awareness element at this stage would be to acquire and implement a personal plan to obtain necessary or required special skills. A goal for the employability skills element would be to plan at least three alternatives for job placement.

The last stage, **specialization,** implies development of specific occupational skills in pursuit of a

CAREER DEVELOPMENT MODEL


ENVIRONMENTS
HOME
SCHOOL
COMMUNITY
ELEMENTS
Self-Awareness
Educ. Awareness
Career Awareness
Economic Awareness
Decision Making
Beginning Competency
Employability Skills
Attitudes & Appreciations
AWARENESS
EXPLORATION
PREPARATION
SPEC-IALIZA-TION
Birth-Grade 6
Grades 7-10
Grades 11-12
POST-SECONDARY CONTINUING EDUC.
DEVELOPMENTAL STAGES

Ohio State/Dr. Victor Galloway 4
Trainers Manual: Career Education and Planning Skills.
MSSD/NTID National Project on Career Education, 1979.

specific occupational area. An example of a goal for the career awareness element at this level would be to gain career knowledge of a field through counseling and guidance, survey courses in career clusters and planned work experience. A goal for the economic awareness element would be to project economic implications of career decision to future life style.

This model differs conceptually and graphically from many contemporary career development models in that the model includes more of the person's life. Most models imply a life-long process in that they include provisions for continuing development and additional learning opportunities beyond the normal school years. The awareness stage of this model begins during the early home experiences of the child, thus practicing the philosophical tenet that career development is, in fact, life long.

As was stated earlier, the principal responsibility for career education is with the school system **in partnership** with industry, community and home. This does not mean that career education does not start until the child is enrolled in a school program. We know full well the importance of those early home experiences in the realization of the child's full potential. Career development depends on the development of healthy and positive concepts regarding self, work and others. Many attitudes and psychological sets are formed prior to the school years. With hearing impaired children, language development, which is so essential to information and experience compilation and processing, is dependent on those early home and community experiences.

Career education programs that exist totally within the schools will not facilitate completely the career development process. Career education must be a **partnership** that brings together the home, school and business-labor-industrial community. Planners from these environments must jointly organize and collaborate with each other on exciting kinds of integrated strategies to provide the information and experiences necessary to bridge the gap between school and work and assist youth to attain career/life maturity.

Our model is now complete. It presents the elements that must be addressed by career education programs. It displays the developmental sequencing which must be considered by implementers of career education.

It is conceptual and multifaceted. It does not provide specific answers to implementation. These answers will be readily discernable as you involve the planners from each essential environment in the development of your career education implementation plans.

370

Questions for Self-Evaluation

Page 1. *Career Development problems for deaf workers include:*

1 a. ______________________________

b. ______________________________

c. ______________________________

2. *List for qualities youth must possess to make the transition from school to work.*

1 a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

3. Career *development* refers to

1 (a) ______________________________

(b) ______________________________

4. *Self identity is achieved by recognizing the relationship of one's career goals to one's:*

2 a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

5. *To achieve educational identity one must understand the relationship of one's career goals to*

2 a. _________________________ and

b. ______________________________

Page 6. *In teaching economic awareness teachers must expose students to the influence of*

2 ______________________________

7. *Career placement is achieved through the development of:*

3 a. ______________________________

b. ______________________________

8. *In addition to the skills acquired, a career education model must also cover the dimensions of*

4 (a) _________________________ and

(b) ______________________________

Self-Evaluation Answers

Question	Answers
1. Career development problems for deaf workers include:	a. underemployment b. on-the-job communication problems c. internal and external stereotype discrimination
2. List four qualities youth must possess to make the transition from school to work.	a. self-understanding b. decision-making skills c. vocational skills d. good work habits
3. Career development refers to (a), while career education refers to (b).	a. a change process over a lifetime b. the strategies used in and outside the classroom to make change
4. Self identity is achieved by recognizing the relationship of one's career goals to one's	a. interests b. attitudes c. achievements d. uniqueness
5. To achieve educational identity, one must understand the relationship of one's career goals to	a. educational requirements b. one's learning capacity
6. In teaching economic awareness, teachers must expose students to the influence of	money
7. Career placement is achieved through the development of	a. employability skills b. social awareness
8. In addition to the skills acquired, a career education model must also cover the dimension of (a) and (b).	a. home b. community

Teacher's Manual: Career Education and Planning Skills.
NPCE: National Project on Career Education, 1979.

npce

National Project on Career Education

A Joint Project of the
Model Secondary School for the Deaf and
the National Technical Institute for the Deaf

PREWORKSHOP READING

Meet Nansie Sharpless, a Deaf Role Model

From "Meet a Member," by Nancy Tooney and Barbara Filner; AWIS Newsletter; Vol. VII (2); March-April, 1979.

Most Association of Women in Science (AWIS) members are acutely aware of the kinds of behavior that limit career opportunities for women and ethnic minorities. Probably few of us ever think about the additional barriers the physically handicapped must face. We first met Nansie Sharpless, a handicapped scientist, in Houston at the American Association for the Advancement of Science (AAAS) annual meeting earlier this year. She lost her hearing as a teenager, yet not only finished her high school education at a "regular" school, but went on to earn a BA in Zoology at Oberlin College and an MS at Wayne State University. After working as a medical technologist for several years, she returned to graduate study and received a PhD in Biochemistry from Wayne State University in 1970. After several years of postdoctoral research at the Mayo Clinic/Mayo Foundation, Nansie was appointed Assistant Professor of Psychiatry at the Albert Einstein College of Medicine in New York, where she is also Director of the Monoamine Laboratory.

AWIS: How did your physical handicap - deafness - affect your choice of education and your career goals?

NS: To answer this question I'll have to give you some perspective. In 1946, when I was 14 years old, I experienced a sudden total loss of hearing due to meningitis. I'd previously planned on going to college and it did not occur to me then that deafness would interfere with this goal. I had not considered the idea of going beyond the baccalaureate degree.

Like most girls in those days, I assumed I'd work a year or so, then marry and become a housewife. Although mother had gone to college and worked as a teacher, she stopped working when she married and I expected to do the same. I was definitely not seeking a lifelong commitment to a career.

When I became deaf, the initial decision was whether I could complete regular high school. I demonstrated that I could do that, and when it came time to select a college - deafness very definitely influenced my choice. Handicapped people are often over-protected, a situation which stunts development of independence. To force myself to become more self-reliant, I only applied to schools that were at least 500 miles away from home. I also thought that a school with small classes would be easiest for me to cope with. Finally, I was aware that being handicapped might reduce my prospects of employment and thought that a degree from a school with a reputation for academic excellence would be an asset. All these factors led to my choice of Oberlin.

Later on, when it became time to select a career, deafness also had a strong influence. I deliberately sought a career where the need for verbal communication would be minimized. Early ideas were veterinary medicine and library science. When I was a junior in college I heard about medical technology, and decided that it was well suited to both my personal tastes and my deafness. I just assumed that a career in teaching or any position requiring a lot of interaction with the public would be impossible. Characteristically, once I had settled on medical technology, I headed for the top schools. I always felt that I should get the best training to offset the liability of deafness. I chose Wayne State, one of two schools then offering a Master's degree program in med tech. As for going beyond the MS, I just did not aspire to that until much later.

AWIS: Were your family and friends generally supportive of your career goals?

NS: Yes, my family was very supportive when it came to going to college and then on for an MS. It was acquaintances, that is, people who did not know me well, who were non-supportive. For instance, social workers advised my parents that I would not be able to return to regular high school following my hearing loss. They said I'd have to go to a school for the deaf or have a private tutor if I wanted to complete school, implying that it would not really be necessary for me to do so since I'd always have to be cared for anyway. Fortunately, my parents ignored this misguided advice. My parents were also criticized for sending me to college, since many believed that a deaf person is suited only for the manual trades and belongs in vocational school. My parents were determined that I should have as good an education as possible to increase my employability. They always assumed that I would eventually earn my own living and I was expected to work during the summer vacations.

Many handicapped people are victims of negative expectations in their parents, teachers, and counselors. Many are not pushed toward any sort of meaningful career goals. I was fortunate, therefore, for having what non-perceptive people might call selfish parents who wouldn't do everything for me.

Of course, I've been discussing here mainly my initial med tech career goal. When I decided to return to school for a PhD in biochemistry, friends and family were decidedly not supportive. My parents' attitude was mostly a puzzled "what for?" There were dire predictions that I'd be unable to find a job because I'd be overeducated. Others questioned my ability to carry out the professional duties of a chemist.

I'd like to add that I've often been subjected to unreasonable expressions of worry. This extends to such basic activities as crossing a city street, living in an apartment, driving a car, or traveling by plane or taxi. I still find that the general public and even my own family do not completely accept the idea that I am capable of handling my own affairs. Only recently, a well-meaning woman asked me "Dr. Sharpless, do you shop?" These negative expectations can be devastating barriers to development of feelings of self-worth and self-reliance in persons with physical limitations.

AWIS: Did your college teachers encourage you to consider graduate school?

NS: I don't recall being encouraged to do anything. Actually, I had almost no contact with most of my college teachers. I think I did mention the idea eventually, but don't recall ever receiving any realistic advice and certainly never any stimulation or encouragement.

I recently ran into one of my high school teachers, who expressed amazement that I was living independently and supporting myself. That I was a professional woman with a PhD was totally outside her comprehension. She said, "Oh go on! Don't kid me!"

AWIS: In particular, when and why were you motivated to seek a PhD in biochemistry? To seek a teaching/research career in general?

NS: I cannot say exactly when and how I decided to go back to school for a PhD. Perhaps it was just a need to undertake new challenges. I had been working as a technologist in medically oriented biochemical research since I'd obtained my MS. Some of my co-workers suggested that I should work for a doctorate. I had been taking night courses at Wayne State without credit ever since I'd graduated. Some were purely for pleasure, others were a definite asset at work. Some of these latter were courses in math and chemistry. I found that I was able to get very high grades in the chem courses if I put my mind to it, and gradually decided to try serious graduate study (for credit).

I know it would look good to say I had this single-minded purpose toward which I worked doggedly, but things didn't go that way at all. It was just a slow growth process. Opportunities arose by chance and I took them. At one time, I assumed that a deaf person could not supervise co-workers. Then I did it and that barrier fell. Likewise, I assumed that deaf people do not earn doctorates. When I did that, yet another barrier fell. (I've since learned of several dozen other pre-vocationally deaf people with earned doctorates.)

Although I am decidedly getting a great deal of personal satisfaction from my work, I must admit that I am strongly motivated by a need to test and break down society's confining stereotyped conceptions of the capabilities of persons with physical limitations. Deafness has definitely provided my drive to achieve.

AWIS: Did you experience any difficulties in getting admitted to graduate school and finding a PhD advisor?

NS: I was admitted as a grad student in chemistry at Wayne State without question. I'd planned to continue working while getting some of the early course work completed. This was done commonly, and my employer was supportive, allowing me to rearrange my work schedule. Then I ran into trouble with one of the required courses. The instructor was neither following a textbook nor putting sufficient material onto the board to enable me to deduce the topics being covered. Deafness is an invisible handicap and until I requested assistance with this course, the faculty simply had not realized. At this point I ran into trouble. Former offers of financial assistance were withdrawn; records were lost or misplaced; basic procedural information was not volunteered and had to be extracted item by item. Since I was not in on the student grapevine, I was often unaware of what should be requested. When I went to pick up an application for an NSF graduate fellowship, the secretary had been instructed to tell me "no thanks, we've already contributed to the United Foundation." I got the forms, and later the fellowship, but it was a hassle I should not have had to cope with.

Early on, many of the faculty regarded the idea of a deaf lady puttering around in their midst as some sort of joke. This was by no means true of the entire department - many individuals were extremely helpful. In general, however, I wasn't taken very seriously. I actually had several offers to remain in a pre-doctoral position at Wayne during the final week preceding my graduation. Even then, the idea that I'd achieved a doctorate had not registered in the minds of some of the members of the chem department.

AWIS: What is your perception of how students react to you in terms of your handicap?

NS: I don't teach in the generally accepted sense of the word. I do interact with students at all levels, including post-docs, but this usually takes the form of assisting them with research projects. Most of these encounters have been enjoyable and productive, but there have occasionally been problems. Some students adopt a paternalistic attitude toward me. For example, one bright young man asked me to "collaborate," assuring me that I'd get a publication if I did his analyses. It took some blunt discussion to show him that doing his own analyses was supposed to be part of his learning experience. Also, the students do, I think, recheck what I tell them with greater care than they might with another faculty member. There is definitely a credibility gap.

AWIS: There has probably been as much or more discrimination against handicapped persons in terms of job opportunities, as against minorities and women. Do you think the situation is changing? Do you think the efforts of AAAS have had an impact on the problem?

NS: I think discrimination against the handicapped is more severe than it is against minorities or women. The idea that a person with a physical limitation has a right to a good education is still in its infancy. Press coverage of the "non-discrimination" Section 504 of the Rehabilitation Act of 1973 has focused on the expense of efforts to make buildings accessible to wheelchair users. Almost nothing is mentioned about the human rights aspects, or the financial advantages that will accrue when handicapped persons become taxpayers instead of welfare recipients.

As an example, take the case of Davis vs. Southeastern Community College, before the Supreme Court. Ms. Davis is a deaf woman denied admittance to a 2-year nursing program. She has been a licensed practical nurse and wishes to be an RN. Although her grades are not outstanding, they are adequate and she has successfully completed one semester of courses. The school is denying admission on the grounds that it is unsafe for a deaf person to be an RN. The school contends that it would endanger the patients and make a mockery of the program because she would not have the physical skills required to function as, say, an instrument nurse, although her license would imply she could do this. What is being ignored is that there are many parts of nursing for which deafness would be no impediment. AAAS is filing an amicus brief on behalf of Ms. Davis, and we anticipate that it will have tremendous impact. *(Note: Davis lost her case. The admissions denial was upheld because some of the program requirements would need to be waived for a deaf student.)*

The efforts of AAAS to make their Annual Meeting accessible to the handicapped also has had far-reaching impact - other professional organizations have followed suit. The recently published AAAS Resource Directory of Handicapped Scientists lists names of about 550 handicapped scientists, about half the number that have been located. This has been a unique effort. Now, when the uninformed state that there are no scientists who have handicaps, we may point. Relevant to the Davis case, for example, there are two deaf women listed who are in nursing. Through the Office of Opportunities in Science Project on the Handicapped in Science, under the able direction of Martha Redden, the handicapped have been recognized as a disadvantaged group and given minority status. The barriers they face when they seek professional education and employment are becoming known, and finally, but not least important, it is shown that handicapped scientists are capable of making contributions to science and society. I hope members of AWIS will actively support the AAAS Project.

AWIS: Do you have any information about special educational programs or funding sources for the handicapped that AWIS members should know about?

NS: Special programs are still sparse. The AAAS has recently published Science for Handicapped Students in Higher Education which lists some of them. Additional information can be obtained from Ben Thompson, Sec-Treas., Science for the Handicapped Assoc., SSS 201, Univ. of Wisconsin, Eau Claire, WI 54701. This organization, sponsored by the Nat'l Science Teachers Assoc., consists of educators who seek to spread awareness of the need to promote science for the handicapped and to develop curricula and materials for use in classrooms. The NSF Division of Scientific Personnel Improvement, Physically Handicapped in Science Program, accepts proposals for projects designed to increase participation in careers in science and science education. Some of the handicapped scientists associated with the AAAS Project have recently formed The Foundation for Science and the Handicapped. This organization, which publishes a newsletter, functions primarily as an advocacy group working to improve the quality and accessibility of science education. More information on this may be obtained from E.C. Keller, Jr., Sec., Fdn for Sci. and the Handicapped, 2326 Grand St., Morgantown, WVA 26505.

AWIS: What advice would you offer a handicapped person interested in a career in science?

NS: There is no reason to believe that you cannot have a rewarding career in science just because you are handicapped. You will have to work very hard to get the needed training, but I think it is worth it. What area of science you go into depends on what you like to do best. I believe that all branches of science have parts that can be handled by a disabled person. Aim for those where your disability is least of an impediment. For instance, if you are deaf, avoid the few areas where auditory signals are of prime importance.

The special kind of persistence you will need to achieve your career goals can be a very valuable asset. In scientific work, one is constantly faced with experiments that have failed. In many cases, all that is needed for success is a slightly new approach. One must have the ability to pick up the pieces and try again. In learning to win despite your physical disability, you will develop the valuable ability to stick it out.

NMT and BF

Questions for Self-Evaluation

Page

1. In what three ways did deafness influence Dr. Sharpless' college selection?

1 *a.* ______________________________

b. ______________________________

c. ______________________________

2. List three ways in which Dr. Sharpless' parents supported her career development and aspirations.

1 & 2 *a.* ______________________________

b. ______________________________

c. ______________________________

3. List three barriers Dr. Sharpless met and overcame in her career development.

1 & 2 & 3 *a.* ______________________________

b. ______________________________

c. ______________________________

Self-Evaluation Answers

Question	Answers
1. In what three ways did deafness influence Dr. Sharpless' college selection?	- To gain self reliance, she choose schools at least 500 miles from home. - She chose a college with small classes for an optimal learning environment. - She chose a college with a reputation for academic excellence to increase employment prospects.
2. List three ways in which Dr. Sharpless' parents supported her career development and aspirations.	- They supported her completion of high school and college. - They ignored misguided advice; for example, institutionalization. - They wouldn't do everything for her. - They encouraged meaningful career goals. - They expected her to work during summers. - They always assumed she would eventually be self-supporting.
3. List three barriers Dr. Sharpless met and overcame in her career development.	- unreasonable expressions of worry - negative expectations - misguided advice - lack of stimulation or encouragement for advanced degree work - lack of models of deaf and/or female persons in her career area - lack of being taken seriously; credibility gap - stereotyped assumptions like: deaf people can't supervise co-workers - lack of student grapevine information - bureaucratic hassle - being patronized

Teacher's Manual: Career Education and Planning Skills; NPCE:
National Project on Career Education; 1979

An Introduction to Career Education

Kenneth B. Hoyt,
Office of Career Education
U.S. Department of Health,
Education and Welfare, 1975

Career education represents a response to a call for educational reform. This call has arisen from a variety of sources, each of which has voiced dissatisfaction with American education as it currently exists. Such sources include students, parents, the business-industry-labor community, out-of-school youth and adults, minorities, the disadvantaged, and the general public. While their specific concerns vary, all seem to agree that American education is in need of major reform at all levels. Career education is properly viewed as one of several possible responses that could be given to this call.

Conditions Calling for Educational Reform

The prime criticisms of American education that career education seeks to correct include the following:

1. Too many persons leaving our educational system are deficient in the basic academic skills required for adaptability in today's rapidly changing society.

2. Too many students fail to see meaningful relationships between what they are being asked to learn in school and what they will do when they leave the educational system. This is true of both those who remain to graduate and those who drop out of the educational system.

3. American education, as currently structured, best meets the educational needs of that minority of persons who will someday become college graduates. It fails to place equal emphasis on meeting the educational needs of that vast majority of students who will never be college graduates.

4. American education has not kept pace with the rapidity of change in the postindustrial occupational society. As a result, when worker qualifications are compared with job requirements, we find overeducated and undereducated workers are present in large numbers. Both the boredom of the overeducated worker and the frustration of the undereducated worker have contributed to growing worker alienation in the total occupational society.

5. Too many persons leave our educational system at both the secondary and collegiate levels unequipped with the vocational skills, the self-understanding and career decision-making skills, or the work attitudes that are essential for making a successful transition from school to work.

6. The growing need for and presence of women in the work force has not been reflected adequately in either the educational or the career options typically pictured for girls enrolled in our educational system.

7. The growing needs for continuing and recurrent education of adults are not being met adequately by our current systems of public education.

8. Insufficient attention has been given to learning opportunities which exist outside the structure of formal education and are increasingly needed by both youth and adults in our society.

9. The general public, including parents and the business-industry-labor community, has not been given an adequate role in formulation of educational policy.

10. American education, as currently structured, does not adequately meet the needs of minority or economically disadvantaged persons in our society.

11. Post high school education has given insufficient emphasis to educational programs at the sub-baccalaureate degree level.

It is both important and proper that these criticisms be answered, in part, through pointing to the significant accomplishments of American education. Growth in both the quality and the quantity of American education must be used as a perspective for answering the critics. Such a perspective, of course, is not in itself an answer. The answers given to such criticisms must take the form of either refutation of the criticisms or constructive educational changes designed to alleviate those conditions being criticized. The prospects of refuting these criticisms, to the satisfaction of the general public, seem slight. Thus, an action program of educational reform appears to be needed. Career education represents one such program.

Answering the Call for Educational Reform: The Rationale of Career Education

Each of the 11 criticisms cited centers on relationships between education and lifestyles of individuals. Any comprehensive program of educational reform designed to answer such criticisms must be based on some common element inherent in each of them. Such a common element must be one that can logically be related to the needs of all persons involved in education. It must be related to the societal goals for education as well as to the individual personal growth goals of learners.

One such element that seems appropriate to consider for use is the concept of work. For purposes of this rationale, "work" has this specific definition:

"Work" is conscious effort, other than that involved in activities whose primary purpose is either coping or relaxation, aimed at producing benefits for oneself and/or oneself and others.

This definition, which includes both paid and unpaid work, speaks to the survival need of society for productivity. It also speaks to the personal need of all individuals to find meaning in their lives through their accomplishments. It provides one possible societal basis for supporting education. Simultaneously, it provides one clearly recognizable reason for both educators and students to engage in education. It emphasizes the goal of education, *as preparation for work*, in ways that neither demean nor detract from other worthy goals of education. It is a concept which, while obviously encompassing economic man, reaches beyond to the broader aspects of productivity in one's total life style - including leisure time.

As such, it serves as a universally common answer to all who ask, "Why should I learn?" The fact that it may represent, for any given individual, neither the only answer nor necessarily the most important answer to this question is irrelevant to this claim for commonality.

Proposals for educational change made in response to any criticism or combination of criticisms cited above can all be accomplished through use of the concept of work. It accommodates the productivity goals of society in ways that emphasize the humanizing goals of American education. It is this quality that lends credence to career education as a vehicle for educational reform.

A Generic Definition of Career Education

In a generic sense, the definition of "career education" must obviously be derived from definitions of the words "career" and "education." In seeking a generic definition for career education, these words are defined as follows:

"Career" is the totality of work one does in his or her lifetime.

"Education" is the totality of experiences through which one learns.

Based on these two definitions, "career education" is defined as follows:

"Career education" is the totality of experience through which one learns about and prepares to engage in work as part of her or his way of living.

"Career," as defined here, is a development concept beginning in the very early years and continuing well into the retirement years. "Education," as defined here, obviously includes more than the formal educational system. Thus, this generic definition of career education is purposely intended to be of a very broad and encompassing nature. At the same time, it is intended to be considerably less than all of life or one's reasons for living.

Basic Concept Assumptions of Career Education

Based on the generic definition of career education and its rationale as cited above, the career education movement has embraced a number of basic concept assumptions. These assumptions include:

1. Since both one's career and one's education extend from the preschool through the retirement years, career education must also span almost the entire life cycle.

2. The concept of productivity is central to the definition of work and so to the entire concept of career education.

3. Since "work" includes unpaid activities as well as paid employment, career education's concerns, in addition to its prime emphasis on paid employment, extend to the work of the student as a learner, to the growing numbers of volunteer workers in our society, to the work of the full-time homemaker, and to work activities in which one engages as part of leisure and/or recreational time.

4. The cosmopolitan nature of today's society demands that career education embrace a multiplicity of work values, rather than a single work ethic, as a means of helping each individual answer the question, "Why should I work?"

5. Both one's career and one's education are best viewed in a developmental rather than in a fragmented sense.

6. Career education is for all persons - including the young and the old, the mentally handicapped and the intellectually gifted, the poor and the wealthy, males and females, students in elementary schools and in graduate colleges.

7. The societal objectives of career education are to help all individuals to (a) want to work, (b) acquire the skills necessary for work in these times, and (c) engage in work that is satisfying to the individual and beneficial to society.

8. The individualistic goals of career education are to make work (a) possible, (b) meaningful, and (c) satisfying for each individual throughout his or her lifetime.

9. Protection of the individual's freedom to choose - and assistance in making and implementing career decisions - are of central concern to career education.

10. The expertise required for implementing career education exists in many parts of society and is not limited to those employed in formal education.

Taken as a whole, these ten concept assumptions represent a philosophical base for current career education efforts. Career education makes no pretense of picturing these assumptions as anything more than the simple beliefs they represent. Certainly, each is debatable and none has sufficient acceptance as yet to be regarded as an educational truism.

Programmatic Assumptions of Career Education

Operationally, career education programs have been initiated based on a combination of research evidence and pragmatic observations. While subject to change and/or modification based on further research efforts, the following programmatic assumptions are intended to serve as examples of the truth as we presently know it. Each is stated, insofar as possible, in the form of a testable hypothesis. By doing so, it is hoped that further research will be stimulated.

1. If students can see relationships between what they are being asked to learn in school and the world of work, they will be motivated to learn more in school.

2. No single learning strategy exists that is best for all students. For example, some students will learn best by reading books, and others will learn best by combining reading with other kinds of learning activities. A comprehensive educational program should provide a series of alternative learning strategies and learning environments for students.

3. Basic academic skills, a personally meaningful set of work values, and good work habits represent adaptability tools needed by all persons who choose to work in today's rapidly changing occupational society.

4. Increasingly, entry into today's occupational society demands that those who seek employment possess a specific set of vocational skills. Unskilled labor is less and less in demand.

5. Career development, as part of human development begins in the preschool years and continues into the retirement years. Its maturational patterns differ from individual to individual.

6. Work values, a part of one's personal value system, are developed to a significant degree during the elementary school years and are modifiable during those years.

7. Specific occupational choices represent only one of a number of kinds of choices involved in career development. They can be expected to increase in realism as one moves from childhood into adulthood and, to some degree, to be modifiable during most of one's adult years.

8. Occupational decision-making is accomplished through the dynamic interaction of limiting and enhancing factors both within the individual and in his present and proposed environment. It is not, in any sense, a simple matching of individuals with jobs.

8. Occupational stereotyping hinders full freedom of occupational choice both for females and for minority persons. These restrictions can be reduced, to some extent, through programmatic intervention strategies begun in the early childhood years.

10. Parent socioeconomic status acts as a limitation on occupational choices considered by children. This limitation can be reduced, to a degree, by program intervention strategies begun in the early years.

11. A positive relationship exists between education and occupational competence, but the optimum amount and kind of education required as preparation for work varies greatly from occupation to occupation.

12. The same general strategies utilized in reducing worker alienation in industry can be used to reduce worker alienation among pupils and teachers in the classroom.

13. While some persons will find themselves able to meet their human needs for accomplishment through work in their places of paid employment, others will find it necessary to meet this need through work in which they engage during their leisure time.

14. Career decision-making skills, job-hunting skills, and job-getting skills can be taught to and learned by almost everyone. Individuals can effectively use such skills, once learned, to enhance their career development.

15. Excessive deprivation in any aspect of human growth and development can retard career development. For persons suffering such deprivation, special variations in career development programs will be required.

16. An effective means of helping individuals discover both who they are (in a self-concept sense) and why they are (in a personal awareness sense) is through helping them discover what they can accomplish in the work they do.

17. The attitudes of parents toward work and toward education act as powerful influences on the career development of their children. Such parental attitudes are modifiable through programmatic intervention strategies.

18. The processes of occupational decision-making and occupational preparation will probably be repeated more than once for most adults in today's society.

19. One's style of living is significantly influenced by the occupations he or she engages in at various times in life.

20. Relationships between education and work can be made more meaningful through infusion into subject matter than if taught as a separate body of knowledge.

21. It can increasingly be expected that education and work will be interwoven at various times in the lives of most individuals rather than occur in a single sequential pattern.

22. Decisions individuals make about the work they do are considerably broader and more encompassing in nature than are decisions made regarding the occupations in which they are employed.

23. Good work habits and positive attitudes toward work can be taught effectively to most individuals. Assimilation of such knowledge is most effective if begun in the early childhood years.

24. The basis on which work can become a personally meaningful part of one's life will vary greatly from individual to individual. No single approach can be expected to meet with universal success.

25. While economic return can almost always be expected to be a significant factor in decisions individuals make about occupations, it may not be a significant factor in many decisions individuals make about their total pattern of work.

This list is intended to be illustrative, rather than comprehensive, in nature. The prime point is that, in formulating action plans for career education, we are not, even at this stage, forced to operate out of complete ignorance. While much more research is obviously needed, we know enough right now to justify and to undertake the organization, installation, and implementation of comprehensive career education programs. The call for educational reform, to which career education seeks to respond, need not and should not wait for further research before we begin to answer it.

Career Education Tasks: Initial Implementation

To the greatest extent possible, initiation of comprehensive career education programs should be undertaken utilizing existing personnel and existing physical facilities. The assumption of new roles by some staff members can be accomplished in most educational systems with no serious loss in total institutional productivity. While the emphasis and methodology will vary considerably from one educational level to another (e.g., the emphasis on vocational education will be minimal at the elementary school level and the emphasis on the home and family component will be minimal at the adult education level), the following kinds of tasks are essential for initial implementation of a comprehensive career education effort.

A. *All classroom teachers will:*

1. devise and/or locate methods and materials designed to help pupils understand and appreciate the career implications of the subject matter being taught

2. utilize career-oriented methods and materials in the instructional program, where appropriate, as one means of educational motivation

3. help pupils acquire and utilize good work habits

4. help pupils develop, clarify, and assimilate personally meaningful sets of work values

5. integrate, to the fullest extent possible, the programmatic assumptions of career education into their instructional activities and teacher-pupil relationships

B. *Some teachers, in addition, will be charged with:*

1. providing students with specific vocational competencies at a level that will enable them to gain entry into the occupational society

2. helping students acquire job-seeking and job-getting skills

3. participating in the job-placement process

4. helping students acquire decision-making skills

C. *The business-labor-industry community will:*

1. provide observational, work experience, and work-study opportunities for students and for those who educate students (teachers, counselors, and school administrators)

2. serve as career development resource personnel for teachers, counselors and students

3. participate in part-time and full-time job placement programs

4. participate actively and positively in programs designed to reduce worker alienation

5. participate in career education policy formulation

D. *Counseling and guidance personnel will:*

1. help classroom teachers implement career education in the classroom

2. serve, usually with other educational personnel, as liaison between the school and the business-industry-labor community

3. serve, usually with other educational personnel, in implementing career education concepts within the home and family structure

4. help students in the total career development process, including the making and implementation of career decisions

5. participate in part-time and full-time job placement programs and in follow-up studies of former students

E. The home and family members with whom pupils reside will:

1. help pupils acquire and practice good work habits

2. emphasize development of positive work values and attitudes toward work

3. maximize, to the fullest extent possible, career development options and opportunities for themselves and for their children

F. Educational administrators and school boards will:

1. emphasize career education as a priority goal

2. provide leadership and direction to the career education program

3. involve the widest possible community participation in career education policy decision-making

4. provide the time, materials, and finances required for implementing the career education program

5. initiate curriculum revision designed to integrate academic, general, and vocational education into an expanded set of educational opportunities available to all students

Until and unless performance of these tasks is underway, we cannot say that implementation of a comprehensive career education program has taken place. While bits and pieces of career education are obvious in many educational systems at present, very few have fully implemented these initial tasks. American education cannot be credited with responding to the demands for educational reform by simply endorsing the career education concept. Only when action programs have been initiated can we truly say a response has been made.

Learner Outcomes for Career Education

Like the career education tasks outlined above, specific learner outcomes for career education will vary in emphasis from one educational level to another. For purposes of forming a broad basis for evaluating the effectiveness of career education efforts, a listing of developmental outcome goals is essential. In this sense, career education seeks to produce individuals who, when they leave school (at any age or at any level), are:

1. Competent in the basic academic skills required for adaptability in our rapidly changing society.

2. Equipped with good work habits.

3. Capable of choosing and who have chosen a personally meaningful set of work values that foster in them a desire to work.

4. Equipped with career decision-making skills, job-hunting skills, and job-getting skills.

5. Equipped with vocational personal skills at a level that will allow them to gain entry into and attain a degree of success in the occupational society.

6. Equipped with career decisions based on the widest possible set of data concerning themselves and their educational-vocational opportunities.

7. Aware of means available to them for continuing and recurrent education once they have left the formal system of schooling.

8. Successful in being placed in a paid occupation, in further education, or in a vocation consistent with their current career education.

9. Successful in incorporating work values into their total personal value structure in such a way that they are able to choose what, for them, is a desirable lifestyle.

It is important to note that these learner outcome goals are intended to apply to persons leaving the formal educational *system* for the world of work. They are not intended to be applicable whenever the person leaves a particular school. For some persons, then, these goals become applicable when they leave the secondary school.

For others, it will be when they have left post high school occupational education programs. For still others, these goals need not be applied, in toto, until they have left a college or university setting. Thus, the applicability of these learner outcome goals will vary from individual to individual as well as from one level of education to another. This is consistent with the developmental natures, and the basic assumption of individual differences, inherent in the concept of career education.

Basic Educational Changes Championed by Career Education

The actions of students, educational personnel, parents, and members of the business-industry-labor community, no matter how well-intentioned, cannot bring about educational reform so long as the basic policies of American education remain unchanges. None of the basic educational policy changes advocated by career education is either new or untested. Yet, none has become common practice in a majority of educational systems. No one of these changes can or should come quickly. Each will require considerable study, debate, and public acceptance before it is initiated. In spite of the obvious difficulties and dangers involved, each of the following basic educational policy changes is championed by the career education movement:

1. Substantial increases in the quantity, quality and variety of vocational education offerings at the secondary school level and of occupational education offerings at the postsecondary school level.

2. Increases in the number and variety of educational course options available to students with a de-emphasis on the presence of clearly differentiated college preparatory,

general education, and vocational education curriculums at the secondary school level.

3. The installation of performance evaluation, as an alternative to the strict time requirements imposed by the traditional Carnegie unit, as a means of assessing and certifying educational accomplishment.

4. The installation of systems for granting educational credit for learning that takes place outside the walls of the school.

5. Increasing use of noncertificated personnel from the business-industry-labor community as educational resource persons in the educational system's total instructional program.

6. The creation of an open entry-open exit educational system that allows students to combine schooling with work in ways to fit their needs and educational motivations.

7. Substantial increases in programs of adult and recurrent education as a responsibility of the public school educational system.

8. Creation of the year-round public school system that provides multiple points during any 12-month period in which a student will leave the educational system.

9. Major overhaul of teacher education programs and graduate programs in education aimed at incorporating the career education concepts, skills, and methodologies.

10. Substantial increases in the career guidance, counseling, placement, and follow-up functions as parts of American education.

11. Substantial increases in program and schedule flexibility that allow classroom teachers, at all levels, greater autonomy and freedom to choose educational strategies and devise methods and materials they determine to be effective in increasing pupil achievement.

12. Increased utilization of educational technology for gathering, processing, and disseminating knowledge required in the teaching-language process.

13. Increased participation by students, teachers, parents, and members of the business-industry-labor community in educational policy making.

14. Increased participation by formal educational institutions in comprehensive community educational and human services efforts.

There are three basic implications inherent in the kinds of educational changes cited here which must be made very explicit.

First, we are saying that while initial implementation of career education programs will be relatively inexpensive, total educational reform is going to be expensive. No matter how much current educational budgets are re-aligned, there is no way that this total reform can be carried out with sums now being expended for the public school and public higher education systems.

Second, we are saying that a substantial portion of the additional funds required could be found in remedial and alternative educational systems that, supported with tax dollars, now exist outside the structure of our public school system and our system of public postsecondary education. Career education represents a movement dedicated to avoiding the creation of a dual system of public education in the United States. A single comprehensive educational system will be both less expensive, in the long run, and more beneficial in meeting educational needs of all persons - youths and adults - in this society.

Third, we are saying that the days of educational isolationism are past. It is time that our formal educational system join forces with all other segments of the total society, including both community service agencies and the business-industry-labor community, in a comprehensive effort to meet the varied and continuing educational needs of both youth and adults. Rather than complain about or compete with other kinds of educational opportunities, all must collaborate in providing appropriate educational opportunities for all citizens.

Unless these kinds of long-range educational reforms are made a basic part of the career education strategy, it is unlikely that the kinds of criticisms that led to establishment of career education will be effectively answered.

Conclusion

As a response to a call for educational reform, career education has operated as a paper priority of American education for the last three years. During this period, it has demonstrated its acceptability as a direction for change to both educators and to the general public. Its widespread application to all of American education has not yet taken place. If successful efforts in this direction can now be made, the result should be complete integration of career education concepts into the total fabric of all American education. When this has been accomplished, the result should be abandonment of the term "career education" and adoption of some other major direction for educational change. The call for educational reform, to which career education seeks to respond, is still strong and persistent across the land. That call can no longer be ignored. Career education stands ready to serve as a vehicle for answering the call. It is time that this vehicle be used.

Questions for Self-Evaluation

Page

1. Which of the following were not conditions calling for educational reform?

1 *a) lack of preparation for making successful transition from school to work*

b) inadequate continuing education programs

c) lack of preparation for making successful transition from work to retirement

d) inadequate career advisement and preparation for women

e) needs of minority groups not being met

f) science and engineering courses have not kept pace with advances in technology

2. What is the "societal basis for supporting education" provided for by the definition of work?

2 ______________________________

____

3. Which of the following are not basic concept assumptions of career education?

2 *a) career education is a developmental life long process*

3 *b) career education is the technical training necessary for one's chosen career*

c) volunteer, leisure, and homemaking activities are included in the definition of work

d) educational institutions shall be the primary purveyors of career education

Page

e) career education is primarily for the minority or economically disadvantaged persons

f) an aim of career education is to make work possible, meaningful, and satisfying for each individual

4 *4. One's lifestyle is influenced by one's occupation - true or false?*

3 *5. Occupational decision-making is the matching of individuals with jobs - true or false?*

4 *6. The business-labor-industry community should be responsible for providing students with specific vocational competencies during the initial implementation of a comprehensive career education effort - true or false?*

7. Who should be responsible for involving community participation in the career education policy decision-making?

5 ______________________________

____

8. At what age or stage can the learner outcomes for career education be expected to have been mastered by the student?

5 ______________________________

____

9. The implications of a full implementation of career education as outlined are

6 *a)*______________________________

*b)*______________________________

*c)*______________________________

Self-Evaluation Answers

Question	**Answers**
1 Which of the following were not conditions calling for educational reform?	c) lack of preparation for making successful transition from work to retirement f) science and engineering courses have not kept pace with advances in technology
2. What is the "societal basis for supporting education" provided for by the definition of work?	Education is preparation for work and work benefits oneself and others
3. Which of the following are not basic concept assumptions of career education?	b) career education is the technical training necessary for one's chosen career d) educational institutions shall be the primary purveyors of career education e) career education is primarily for the minority or economically disadvantaged persons
4. One's life style is influenced by one's occupation - true or false?	True
5. Occupational decision-making is the matching of individuals with jobs - true or false?	False
6. Business-labor-industry community should be responsible for providing students with specific vocational competencies during the initial implementation of a comprehensive career education effort - true or false?	False
7. Who should be responsible for involving community participation in the career education policy decision-making?	Educational administrators and school boards
8. At what age or stage can the learner outcomes for career education be expected to have been mastered by the student?	When the student leaves the formal educational system for the world of work
9. The implications of a full implementation of career education as outlined are:	a) educational reform is expensive b) creation of a single comprehensive educational system c) end of educational isolationism

NPCE

National Project on Career Education

A Joint Project of the
Model Secondary School for the Deaf and
the National Technical Institute for the Deaf

Dr. Judy Egelston-Dodd,
Coordinator
One Lomb Memorial Drive
Rochester, New York 14623
716-475-6840

March 25, 1980

TO: Career Education Workshop Participants*

FROM: Marcia Rothstein

RE: Pre-Workshop Information

Under the auspices of the MSSD/NTID National Project on Career Education (NPCE), a team of three trainers from California School for the Deaf, Berkeley, will present a Career Education and Planning Skills workshop. This workshop will cover concepts of career education, systematic planning, and implementation. Participants will work in departmental teams and as a whole to develop an implementation plan for career education at the Arizona School for the Deaf, Tuscon. In addition to being able to help develop your school's career education implementation plan, you, as a participant may qualify to receive inservice credit toward CED recertification.

The workshop will be held April 16, 17, and 18. We would like to begin with a dinner at La Fuente at 8:00 pm Tuesday, April 15th. Then registration for the workshop will be held at 8:00 Wednesday morning, with the first session beginning at 8:30 am. On Wednesday the sessions will run from 8:30 to 5:00, and on Thursday and Friday from 8:30 to 4:15. We will have an hour and a half break for lunch each day. You will be responsible for your dinner Tuesday evening and your lunches during the workshop. The sessions will be signed in total communication.

When we first meet on Wednesday morning there will be an opportunity for each department to share information about the highlights of its career education program (past efforts, present accomplishments, plans for the future, etc.) To facilitate the sharing, we hope your departments will meet prior to attending the workshop to pool your information and identify a department spokesperson who can present a 5 to 10 minute synopsis. We will have reports from the elementary department, junior high school, senior high school, and any other department that you might identify.

I am sending you a biographical data form and a pre-test, both of which you should complete and return to me in the enclosed stamped envelope. I am sending also pre-workshop readings which you should finish reading before the workshop. These papers will give you a good background for the workshop and make your participation easier as well as helping with your school planning for career education.

We are looking forward to meeting you at dinner Tuesday evening, April 15th.

Sincerely,

Marcia Rothstein
Career Education Coordinator

*Adapted example used for ripple workshop, Tucson, AZ, 1980.

Appendix B

TRANSPARENCY MASTERS

Two National Working Conferences

MSSD - February 1978
NTID - September 1978

Goals:

1. to clarify career education concepts
2. to increase awareness of the relevance of career education for the hearing impaired
3. to share what has been learned about implementing career education
4. to identify issues needing further attention and development for the hearing impaired
5. to obtain suggestions for ways to address the most urgent issues

Needs Identified

1. inservice training for staff in career education
2. the development of a comprehensive plan for the schools to implement career education programs

MSSD/NTID National Project on Career Education
Workshop on Career Education and Planning Skills

Workshop Goals

1. To increase participant awareness of career education and how it is implemented.
2. To increase participant skill in planning, using career education as the vehicle.
3. To help participants develop a plan of action for their home school.
4. To expose participants to some career education activities which they may wish to see used in workshops in their home schools.

Trainers Manual: Career Education and Planning Skills.
MSSD/NTID National Project on Career Education, 1980.

Roadmap of Content and Modules

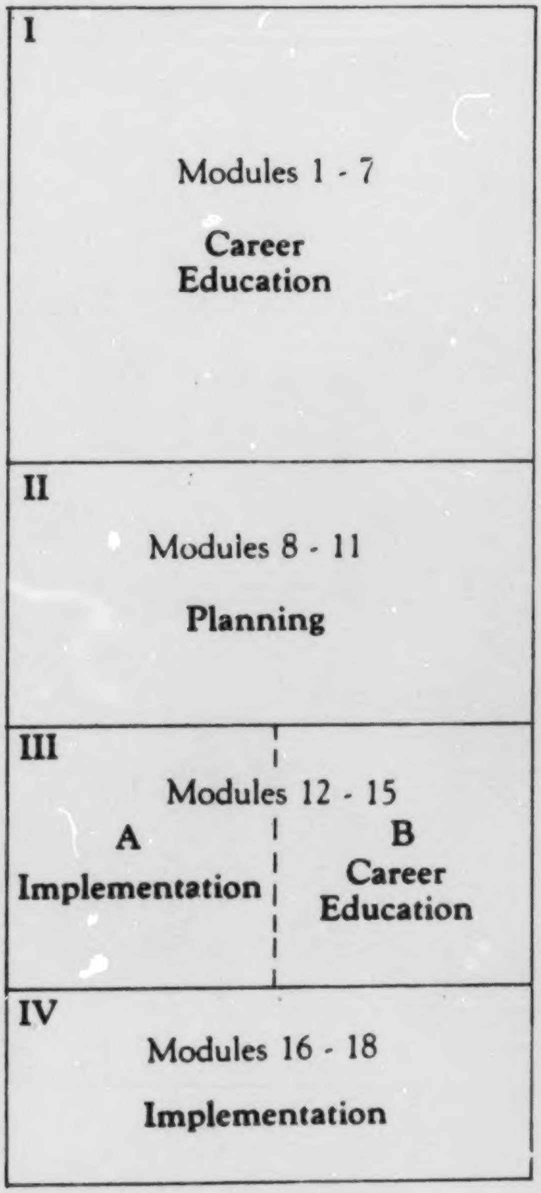
I. These modules provide administrators, teachers and counselors with basic career education background. New concepts include stereotyping, infusion of the CCEM model and collaboration with community programs.

II. These modules provide administrators, teachers and counselors with basic planning background. Appreciation for a systematic approach and a common language for the planning process should result.

IIIA. Administrators will be exposed to the NPCE implementation process and learn how to lead a group to consensus.

IIIB. Teachers/Counselors will receive indepth practice in curriculum infusion of the elements of the CCEM.

IV. All team members will prepare an implementation plan for their most urgent goals.


I
Modules 1 - 7
Career Education
II
Modules 8 - 11
Planning
III
Modules 12 - 15
A
Implementation
B
Career Education
IV
Modules 16 - 18
Implementation

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MSSD/NTID National Project on Career Education, 1980.

Module One Objectives

You will:

1. demonstrate an awareness of the workshop goals, schedule, and format.
2. demonstrate an awareness of other participants' career education efforts and identify similarities to their own programs.
3. list several stereotypes related to deafness or deaf people and relate them to career development of the hearing impaired.

Trainers Manual: Career Education and Planning Skills.
MSSD/NTID National Project on Career Education, 1980.

Module Two Objective

You will:

1. describe the importance of self awareness to the career development process.

Trainers Manual: Career Education and Planning Skills.
MSSD/NTID National Project on Career Education, 1980.

Value Processing Questions

1. Which questions were most difficult to answer? Why?
2. Which questions required risk taking?
3. Did any questions draw a surprising response from the group? Which?
4. Why is it necessary to assess our values toward work as a starting point for career education?

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Values Clarification

The steps in valuing include:

- choosing from among alternatives
- prizing your choice
- acting or behaving consistently with your choice.

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Self-Concept

- You need to know who you are before you can decide what you want to become.

- Positive self-concept is the basis for all achievement and growth.

- Handicapped students especially need success-oriented experiences structured into their school activities to build and maintain positive self-concept.

- Career education experiences can provide for realistic and positive self-concept development.

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Who We Are

There are a total of ____ participants in attendance from ____ states.

Males ____
Females ____

Hearing Impaired ____
Other Handicapped ____

Average age ____

An average of ____ years in education of the deaf
most ____
least ____

An average of ____ years in career education
most ____
least ____

Degrees held
Bachelors ____
Masters ____
Doctorate ____

Reason for Attending
____ Requested by Supervisor
____ Professional Growth
____ Fulfill Inservice Requirement
____ Other

Module Three Objectives

You will:

1. describe the possible barriers that could influence the career development of disabled individuals.
2. clarify your perceptions of the importance of career education for your hearing impaired students.
3. demonstrate awareness of research results on perceptions of educators of the deaf toward career education goals.

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Film Exercise

As you watch the film, listen for or watch for, and write down any instances that fall into the two following categories:

(1) things that contributed to the worker's success

(2) things that were internal or external barriers.

	Things that Contributed to the Worker's Success	Internal/ External Barriers
Worker 1 Blind		
Worker 2 Wheelchair		
Worker 3 Cerebral Palsy		
Nansie Sharpless Deaf		

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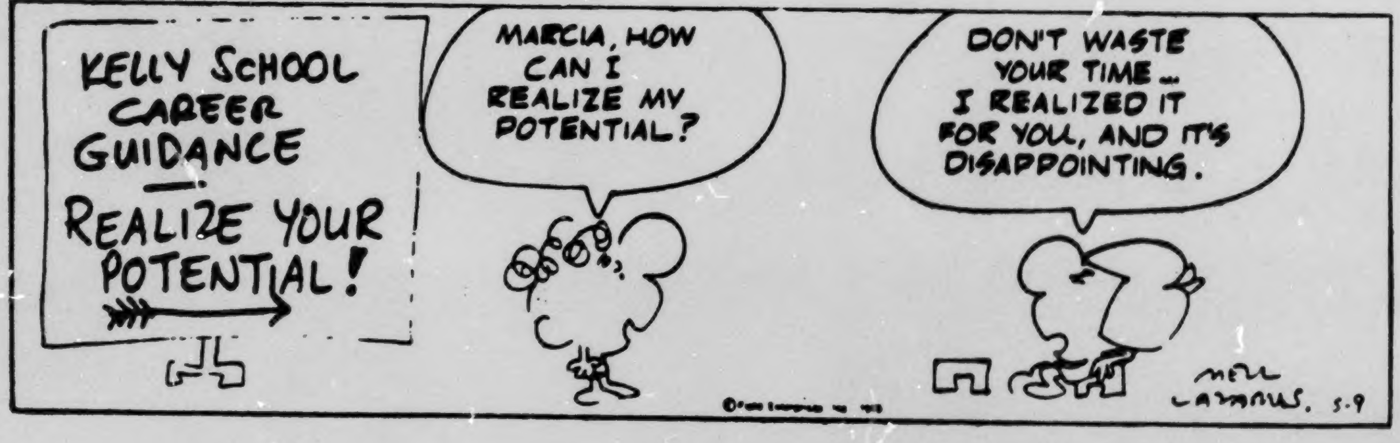
MISS PEACH


KELLY SCHOOL CAREER GUIDANCE — REALIZE YOUR POTENTIAL!
MARCIA, HOW CAN I REALIZE MY POTENTIAL?
DON'T WASTE YOUR TIME... I REALIZED IT FOR YOU, AND IT'S DISAPPOINTING.
MELL LAZARUS. 5-9

MISS PEACH by Mell Lazarus.
Courtesy of Mell Lazarus and Field Newspaper Syndicate.

T-3-3

Module Four Objectives

You will:

1. define "work" and describe how to operationalize the concept with students.

2. distinguish between
    a. work / career / job
    b. career education / career development
    c. career education / vocational education.

3. appreciate the need for a positive value toward work.

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Hoyt's Definition *

Work is conscious effort aimed at producing benefits for oneself and/or others.

Career is the totality of work one does in his or her lifetime.

Job is an immediate task, paid or nonpaid.

*As defined by Ken Hoyt in several papers.

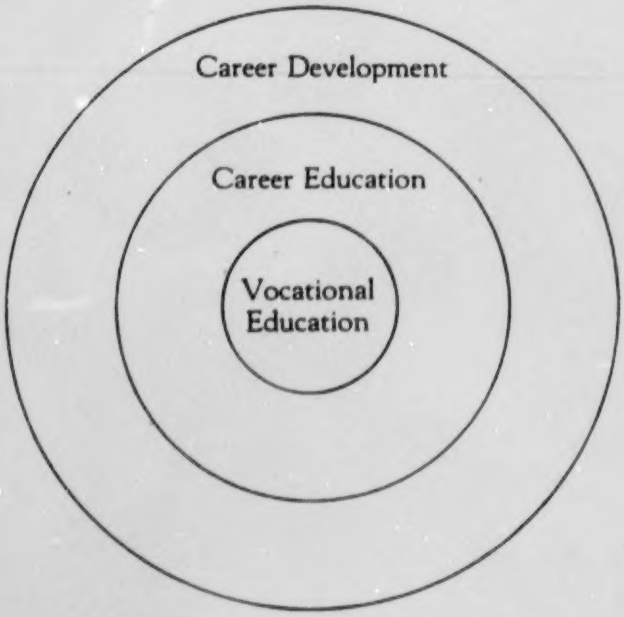
Trainers Manual: Career Education and Planning Skills.
MSSD/NTID National Project on Career Education, 1980.

Career Development vs. Career Education vs. Vocational Education

Career Development
a natural process involving maturation, ones total experiences

Career Education
a planned program of experiences to enhance Career Development

Vocational Education
formal and informal experiences which lead to the acquisition of employable skills


Career Development
Career Education
Vocational Education

Trainers Manual: Career Education and Planning Skills.
MSSD/NTID National Project on Career Education, 1980.

Module Five Objectives

You will:

1. list the 8 elements of career education.
2. describe the 4 developmental stages and 3 environments involved in career education.
3. match several developmental tasks to the correct stage and element.

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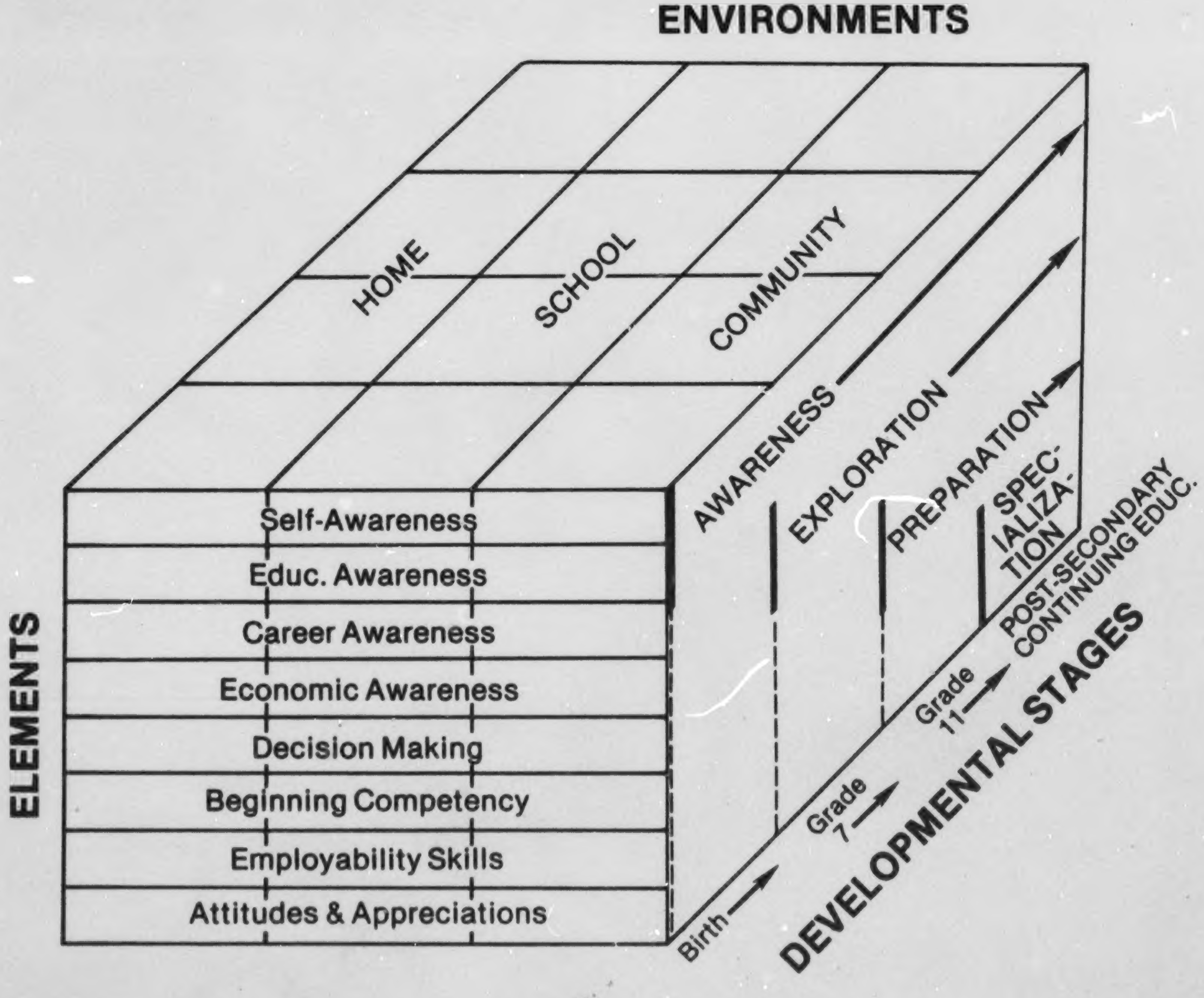
CAREER DEVELOPMENT MODEL


ENVIRONMENTS
HOME
SCHOOL
COMMUNITY
ELEMENTS
Self-Awareness
Educ. Awareness
Career Awareness
Economic Awareness
Decision Making
Beginning Competency
Employability Skills
Attitudes & Appreciations
AWARENESS
EXPLORATION
PREPARATION
SPEC-IALIZA-TION
Birth
Grade 7
Grade 11
POST-SECONDARY CONTINUING EDUC.
DEVELOPMENTAL STAGES

CCEM (Ohio State University, as modified by Dr. Victor Galloway)
Trainers Manual: Career Education and Planning Skills.
MSSD/NTID National Project on Career Education, 1980.

Stages of Career Development

Awareness - passive compiling and integration of information and experiences

Exploration - testing and manipulating concepts and experiences

Preparation - broad development of entry skills

Specialization - development of specific skills within a narrow area

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LIST OF TASKS

Stage	*Task*	*Element*
	1. In the want ad section of the newspaper look up and compare the wages of a truck driver and a college professor.	
	2. Name the job titles of 3 workers seen at school.	
	3. Prior to an assignment to a work-study program, fill out a job application in area of specialization.	
	4. Following the guidelines for amateur coin collectors, choose ten coins to begin a coin collection.	
	5. Learn to drive a car.	

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Module Six Objectives

You will:

1. define infusion and list 3 reasons why the infused approach is better from an implementation point of view than an add-on approach.
2. distinguish between infused and add-on approaches.

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MSSD/NTID National Project on Career Education, 1980.

Infusion - when career education is woven into or taught along side a regular curriculum topic.

Add-on - a separate course or unit totally devoted to a career development concept.

Infusion	Add-on
1. More relevant	Not tied to classwork
2. Higher achievement	No change in achievement
3. Every teacher involved	Only special teachers do career education
4. No new expense	More expensive
5. Developmental	Free standing
6. Requires inservice training	Easier to develop

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Infusion Example One

Subject: Social Studies

Content Objective: Community Helpers

Stage: Awareness

CE Objective: Self Awareness

Activity: Elementary age deaf students visit community helpers as part of their social studies curriculum. It will be easy for their teacher to infuse some self awareness (career education) by asking the students if they would like to wear a uniform to work, like a law enforcement officer (cop).

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Infusion Example Two

Subject: Math

Content Objective: Banking

Stage: Exploration

CE Objective: Beginning Competency, Economic Awareness, Decision Making

Activity: In math class, deaf eighth graders will choose which bank to deposit their savings based on the best interest rates. Their teacher is infusing economic awareness, decision-making and beginning competency (working with data), at the exploration stage.

Comprehensive CE Curriculum

- review current curriculum for CE activities
- match these to the elements of the CCEM
- note elements which have no infused activities
- write CCEM objectives and activities to fill in the gaps
- commercially available CE materials may not meet your needs
- *Cost of infusion:* CCEM objective writing requires some skill development
- *Cost of add-on:* adding on to student schedule and school budgets
- the reward for infusion is worth the effort

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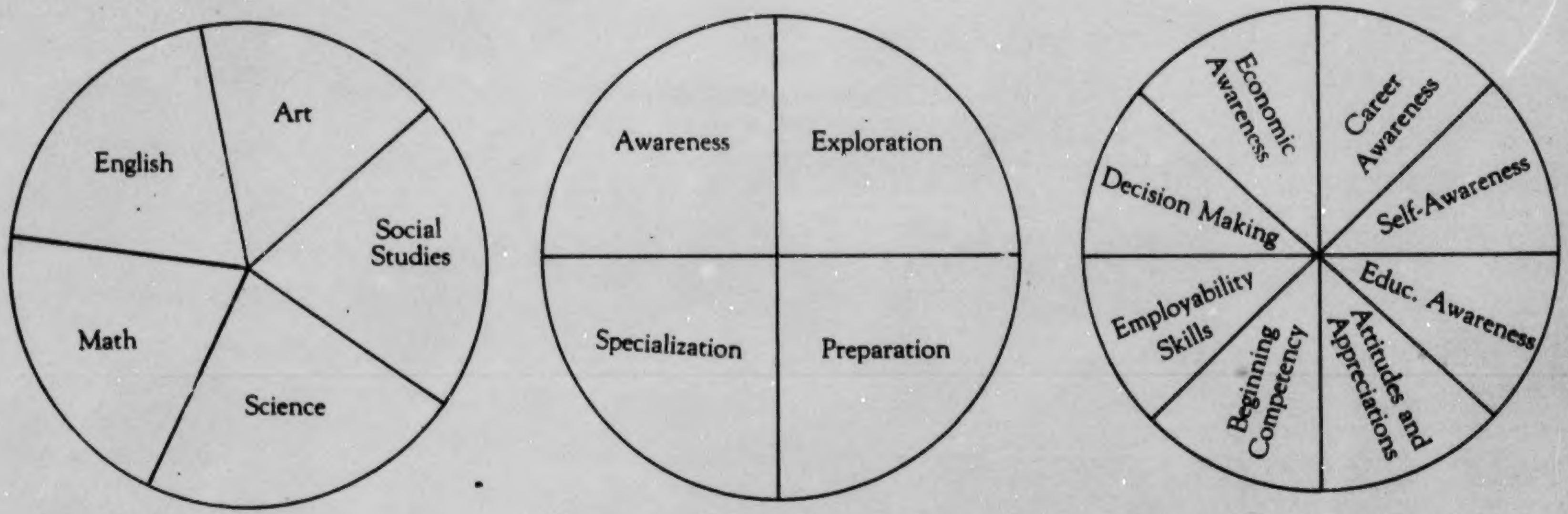
T-6-5

Infusion Spinner Board



Art
English
Social Studies
Math
Science
Awareness
Exploration
Specialization
Preparation
Economic Awareness
Career Awareness
Decision Making
Self-Awareness
Employability Skills
Educ. Awareness
Beginning Competency
Attitudes and Appreciations

Subject Areas

Developmental Stages

Elements

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Module Seven Objectives

You will:

1. describe several places outside of the regular classroom situation in which career education concepts or activities could be integrated.
2. distinguish between the processes of collaboration and cooperation of school and community.
3. identify community sites for a potential field trip.

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MSSD/NTID National Project on Career Education, 1980.

Infusion vs. Integration

Infusion	*Integration*
1. more relevance	1. more relevance
2. higher achievement	2. higher achievement
3. simultaneous learning	3. simultaneous learning
4. cheaper	4. cheaper
5. part of regular classes	5. part of regular classes
6. all teachers involved	6. all teachers involved
	7. environments of home and community

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MSSD/NTID National Project on Career Education, 1980.

Cooperation vs. Collaboration

Cooperation	*Collaboration*
1. asking community to buy into established plans	1. joint decision-making with community representatives
2. one-way communication	2. two-way communication

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Shifting Subgroups

A. Planning is:
   1. time-consuming
   2. essential
   3. difficult
   4. fun

B. The best way to plan is:
   1. to work alone
   2. to involve others
   3. to let the principal do it
   4. step by step

C. The biggest advantage of planning is:
   1. being well organized
   2. being accountable
   3. seeing your progress
   4. knowing what you want

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MSSD/NTID National Project on Career Education, 1980.

Roadmap of Content and Modules

I. These modules provide administrators, teachers and counselors with basic career education background. New concepts include stereotyping, infusion of the CCEM model and collaboration with community programs.

II. These modules provide administrators, teachers and counselors with basic planning background. Appreciation for a systematic approach and a common language for the planning process should result.

IIIA. Administrators will be exposed to the NPCE implementation process and learn how to lead a group to consensus.

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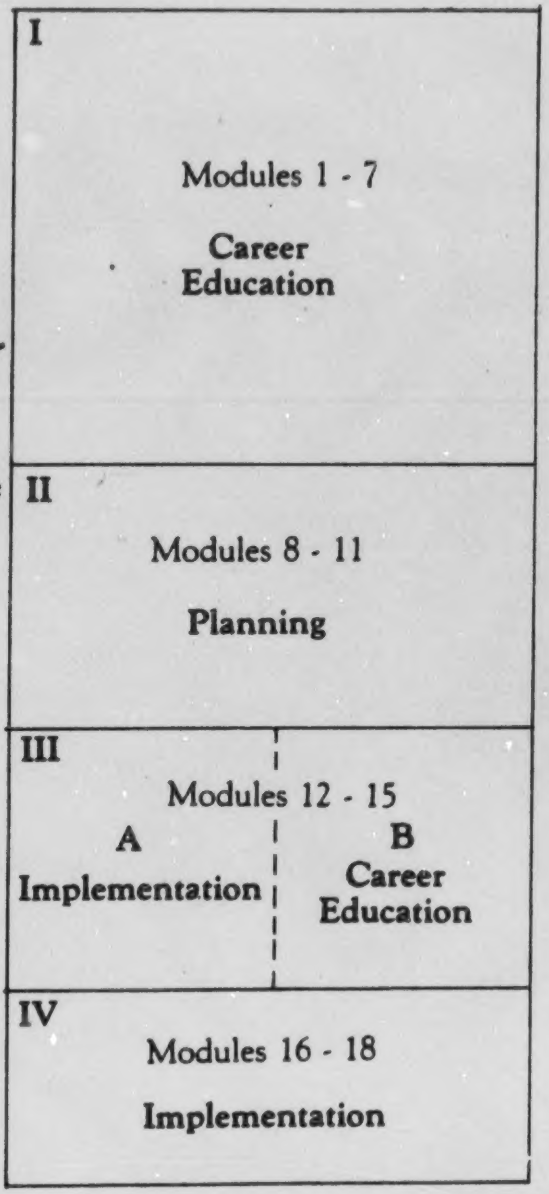
IV. All team members will prepare an implementation plan for their most urgent goals.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Modules 16 - 18
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Module Eight Objectives

You will:

1. express an appreciation for the concept of a systematic approach.
2. identify the steps involved in using the systematic planning and implementation processes.

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Systematic Planning and Implementation

Planning

1. Assess needs
2. Analyze power and support
3. Set goal (specific)
4. Design evaluation
5. Overcome resistance

Implementation

1. Goal statement
2. Task analysis
3. Timelines
4. Resources
5. Evaluation

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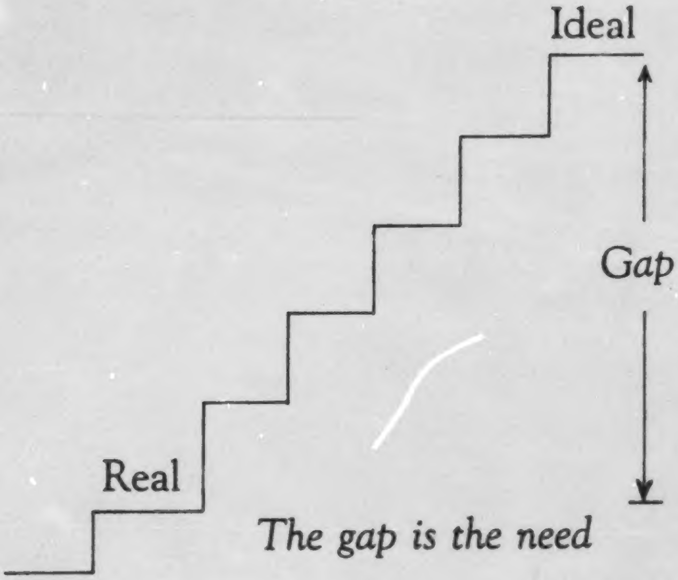
Planning: Needs Assessment



The gap is the need

Systematic Planning

1. **Assess Needs**
2. Analyze Power and Support
3. Set Goal (Specific)
4. Design Evaluation
5. Overcome Resistance

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Module Nine Objectives

You will:

1. identify needs assessment as the first element involved in the systematic planning process.
2. specify how a school team can operationalize a needs assessment.

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Module Ten Objectives

You will:

1. identify the second step in systematic planning as the analysis of power and support.

2. identify appropriate people as to function in a support group.

3. describe how the analyses of power and support are applied to career education.

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Planning: Power and Support

1. Assess Needs

2. Analyze Power and Support

3. Set Goal (Specific)
4. Design Evaluation
5. Overcome Resistance

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Sources of Power*

Position
Power derived from superior authority.

Expertise
Power derived from extensive knowledge or experience in career education.

Social status
Power derived from high status in the community, through acquaintances or relationships.

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* Booklet No. 7 - "Planning and Management." Career Education Dissemination Project Implementation Booklet Series. Roseville Area Schools, Roseville, Minnesota. 1977.

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MSSD/NTID National Project on Career Education, 1980.

Support Systems

A support system consists of the network of groups within the school-community setting that will promote career education.

Support Systems can include formal and informal groups.

There are several ways people can provide support.

1. Communication - efficiently relaying information in any size school-community setting. May include the sharing of personal intentions and feelings.
2. Problem solving - making judgments and decisions which represent group consensus.
3. Psychological - empathy, regard.
4. Action Plans - taking on specific tasks, helping implement a program.

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Module Eleven Objectives

You will:

1. describe the relationship between goal setting and evaluation.
2. be aware of the use of incentives to minimize the effects of stressful change.
3. list in correct sequence the five elements involved in the systematic planning process.

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Planning: Goal Setting and Evaluation

1. Assess Needs
2. Analyze Power and Support
3. **Set Goal**
4. **Design Evaluation**
5. Overcome Resistance

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Goal Setting/Evaluation Lecturette

- The goal represents a realistic estimate of an ideal situation.
- Where power and support are strong, the goal should be achieveable.
- Data collection should be planned to document progress and achievement of the goal.
- This data-collection process and the comparison between what you wanted and what you have achieved is *evaluation*.
- The evaluation techniques should also specify how you'll know when you have reached your goal.

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Systematic Planning

1. Assess Needs
2. Analyze Power and Support
3. Set Goal (Specific)
4. Design Evaluation
5. Overcome Resistance

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Roadmap of Content and Modules

I. These modules provide administrators, teachers and counselors with basic career education background. New concepts include stereotyping, infusion of the CCEM model and collaboration with community programs.

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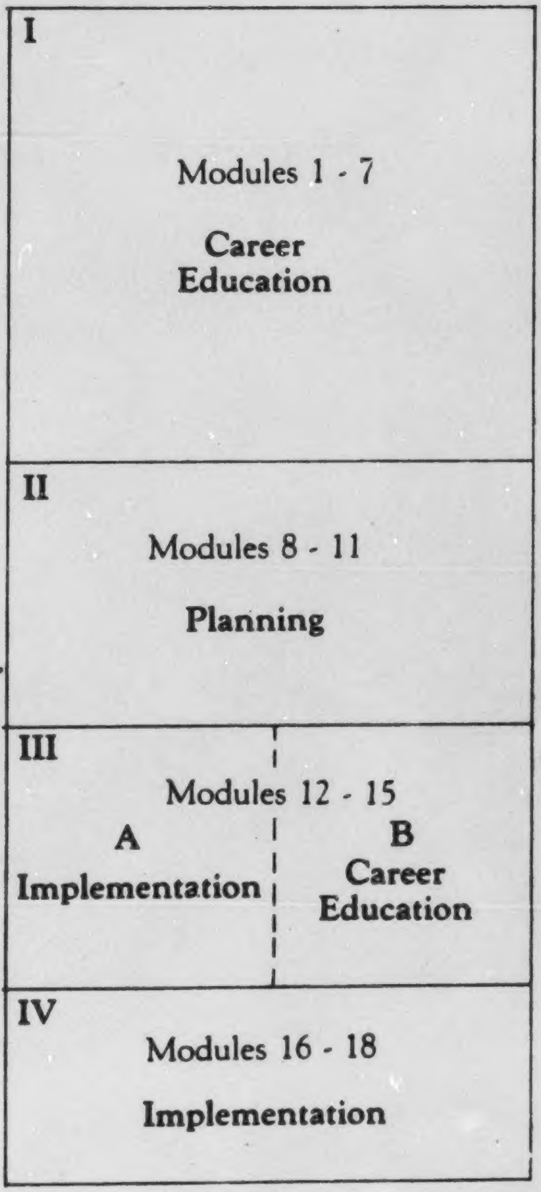
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Module Twelve-A Objectives

You will:

1. name and describe two out of three useful techniques for reaching decisions with a group.
2. express appreciation for the benefits derived from decisions reached by group processes vs. those derived from an individual judgment.
3. identify the role of decision making in the systematic planning process.

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Interactive Group Technique

1. Open the discussion by brainstorming possible alternatives or solutions.

2. Accept all ideas and list them on the board as they are generated.

3. After people run out of ideas, begin to categorize the alternatives.

4. Rewrite the list organized by category.

5. Ask group to give pro's and con's for each alternative.

6. Make a decision by voting for only one idea. Alternative with highest vote is selected.

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Nominal Group Technique

1. Open the session by having each person write out their alternative ideas.

2. Open the discussion by calling on each person in turn to give one of their ideas (round robin) until all ideas are listed.

3. After ideas are listed, ask group to discuss each idea in order, to clarify the meaning of each.

4. Reach a consensus by voting on the three top or best ideas. A second vote may be taken after discussion of the results of the preliminary vote. Item with the most votes is the group choice.

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Delphi Technique

1. Typically accomplished by mailing out questionnaire; takes the most time.
2. Respondents generate ideas in first mailing. These are categorized and whole list is mailed out again.
3. Respondents rate each of the ideas. These ratings are averaged for each item.
4. Each respondent then receives the average rating and their own rating for each item. They are then asked to re-rate each item in light of the average rating.
5. Final rating is used to rank order the ideas. Top rated idea represents the group choice. Notify group of the results.

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Decision Making Techniques

IGT	NGT	Delphi
1. Open the discussion by brainstorming possible alternatives or solutions.	1. Open the session by having each person write out their alternative ideas.	1. Typically accomplished by mailing out questionnaire; takes the most time.
2. Accept all ideas and list them on the board as they are generated.	2. Open the discussion by calling on each person in turn to give one of their ideas (round robin) until all ideas are listed.	2. Respondents generate ideas in first mailing. These are categorized and whole list is mailed out again.
3. After people run out of ideas, begin to categorize the alternatives.	3. After ideas are listed, ask group to discuss each idea in order, to clarify the meaning of each.	3. Respondents rate each of the ideas. These ratings are averaged for each item.
4. Rewrite the list organized by category.	4. Reach a consensus by voting on the three top or best ideas. A second vote may be taken after discussion of the results of the preliminary vote. Item with the most votes is the group choice.	4. Each respondent then receives the average rating and their own rating for each item. They are then asked to re-rate each item in light of the average rating.
5. Ask group to give pro's and con's for each alternative.		5. Final rating is used to rank order the ideas. Top rated idea represents the group choice. Notify group of the results.
6. Make a decision by voting for only one idea. Alternative with highest vote is selected.		

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Module Thirteen-A Objectives

You will:

1. list the steps in using the NGT.
2. identify three characteristics of a healthy organization.

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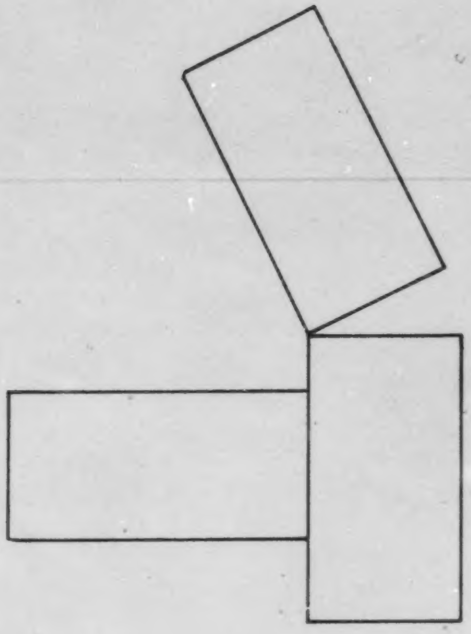
Design One



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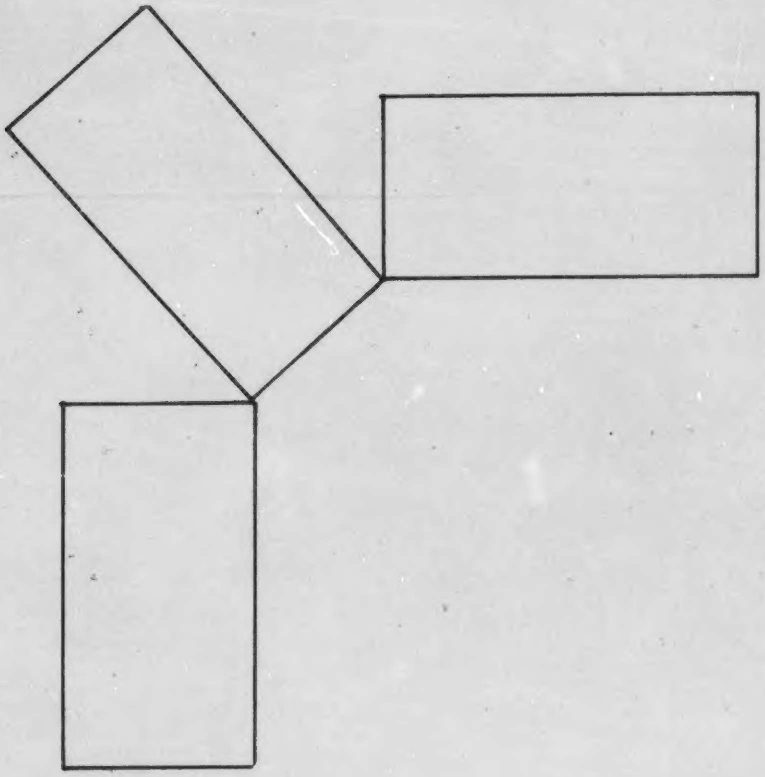
Design Two



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Module Fourteen-A Objectives

You will:

1. define collaboration and contrast with cooperation with respect to one way vs. two way communication.
2. identify the populations to be represented on a career education community advisory committee.
3. contrast the function and member composition of an advisory group and a task force.

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Cooperation vs. Collaboration

Cooperation:	*Collaboration:*
1. The school develops a plan and presents it to the groups in the community.	1. Representatives of community groups, parents and the school join in developing a plan.
2. All definitions and timelines are developed by the school.	2. Together they work out mutually agreeable definitions and timelines.
3. The school generally asks for community support and help in implementing the school plan.	3. Support is virtually guaranteed because of the broad involvement in the planning.

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The Differences Between a Task Force and an Advisory Committee

Task Force	*Advisory Committee*
Deals with specific problems or creates specific programs.	Is involved with the whole plan
Is created by the advisory committee	Is created by the career education team
Longevity is limited to short term assignment	Exists as long as program planning and implementation are occurring

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Module Fifteen-A Objectives

You will:

1. list in order the steps involved in documenting the systematic implementation of career education.
2. describe the milestones for implementation of a comprehensive plan for career education and the format for documentation.

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Steps in Systematic Implementation

1. State your top-rated goal.
2. Analyze tasks.
3. Schedule timelines.
4. Analyze resources.
5. Evaluate progress and report milestones.

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IV	Modules 16 - 18 **Implementation**	

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Module Twelve-B Objectives

You will:

1. describe the internal and external forces that influence one's career.
2. create an infused activity for self awareness and for career awareness.
3. recognize the infusion of work habits as a vehicle for an icebreaker.
4. recognize the infusion of the "A to Z Game" as a vehicle for a career awareness activity.
5. be able to look up a job title in the D.O.T.

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Module Thirteen-B Objectives

You will:

1. recognize infused activities for educational awareness and economic awareness.
2. describe an infused classroom activity for educational awareness and for economic awareness.

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Unusual Occupational Titles

Ankle patch molder
Belly wringer
Camera operator
Dope house operator helper
Egg breaker
Finger waver
Gherkin pickler
Hog head singer
Ichthyologist
Japanner
Knot picker
Leaf sucker operator
Mother repairer
Nuclear powerplant supervisor
Orthotist
Professional shopper
Quarter folder
Raisin washer
Sweat box attendant
Tipper
Upsetter setter-up
Vanilla-chocolate coin counter
Whiskey proof reader
X-ray consultant
Yeast pusher
Zyglo inspector

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DPT Shifting Fingers

farmer

accountant

mechanic

cosmetologist

teacher of the deaf

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Module Fourteen-B Objectives

You will:

1. describe one everyday activity representative of each work orientation: data, people, and things.
2. describe an infused classroom activity for beginning competency representing at least one orientation: data, people, or things.

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Infused Activity 1

Content area: Speech

Objective: Spontaneous Communication

Activity: Tell a joke .

Stage: Preparation

CE Objective: Working with people. Being able to tell a joke effectively requires a student to have beginning competency in the speech area, and in working with people. This could be labeled with a job title, but more important is self-insight into working with people.

Infused Activity 2

Content area: Math

Objective: Learning concept of rank order

Activity: Using batting averages, rank order the Pittsburgh Pirates players.

Stage: Preparation

CE *Objective:* Working with numbers (data). In order to rank numbers, a student must have the beginning competency in numerical concepts. The teacher could discuss various careers of people who work with numbers.

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Infused Activity 3

Content area: Metals shop

Objective: Manual Dexterity - using a wrench

Activity: Fix a bicycle handle bar .

Stage: Exploration

CE Objective: The job title could be that of mechanic, but more important is to stress personal awareness of beginning skills in working with things.

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Module Fifteen-B Objectives

You will:

1. identify available human resources within a school useful in teaching career education activities.
2. describe several ways of getting and using information about significant adults' or students' experiences.
3. list several sources of career education ideas from print or media resources.

Criteria for Selecting Print/Media Resources

1. Positive image for race, sex and handicapping condition
2. Publisher should be willing to adapt high-cost materials.
3. Coordination with other program components.
4. Hands-on activities.
5. Any language level can be adapted.

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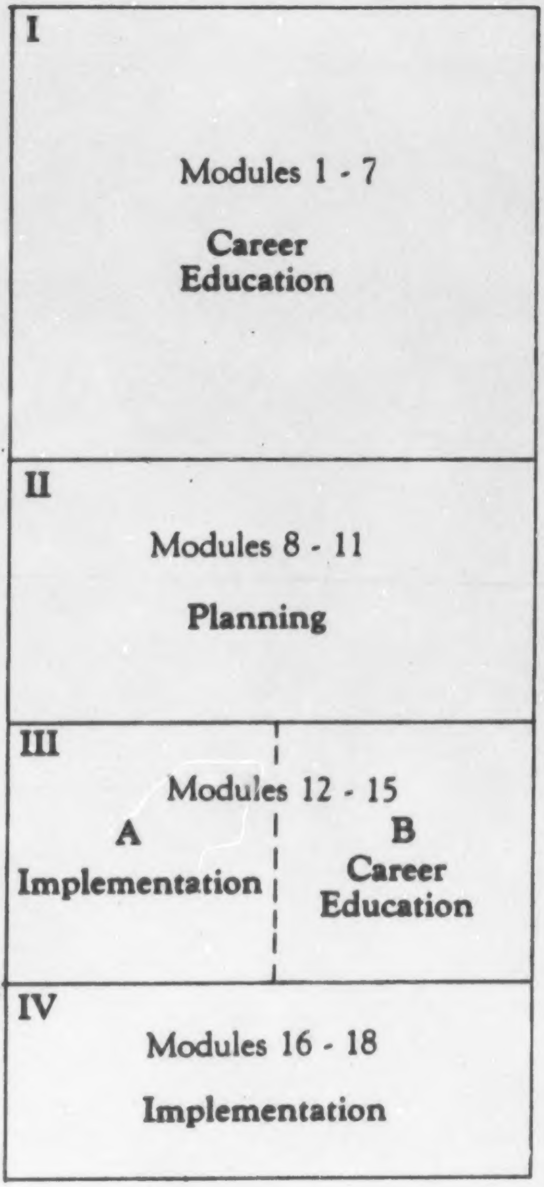
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Module Sixteen Objectives

You will:

1. be aware of and appreciate the unique role and strengths you bring to your team.
2. specify how you and your team will operationalize the new concepts learned.

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Module Seventeen Objective

You will:

1. develop and hand in a pre-plan consisting of at least three goals.

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Module Eighteen Objective

You will:

1. recognize sources of assistance for implementation of your pre-plan goals.

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Appendix C

SUMMARY OUTLINE

of

The Delivery Skills Workshop

Delivery Skills Overview

Session	Objective	Activity	Evaluation
A	On the end of session evaluation form, 80% of the participants will		
	1. Report moderately high to high level of interest and participation in the workshop	Dyadic Sharing	Workshop Questionnaire Items #2, 4
	2. Report moderately high to high level of comfort in and satisfaction with the workshop	Processing	Workshop Questionnaire Items #3, 6
	3. Report a clear understanding of overall workshop goals and outcomes	Workshop overview	Workshop Questionnaire Item #1
	4. Identify at least 3 inclusion activites from the strategies used in the workshop so far	Dinner, Name tags Dyadic sharing	Delivery Skills Test Item #3
	5. Describe the effect of group size on discussion		Delivery Skills Test Items #7, 10
	6. List 3 assumptions for experiential learning		Delivery Skills Test Item #6

Session	Objective	Activity	Evaluation
B	At the end of Session B on the evaluation form participants will:		
	1. Demonstrate awareness of the group dynamics involved reaching consensus	Admissions Committee	Delivery Skills Test Items #8, 11
	2. Recognize variety of decision-making styles within a leaderless group	Processing	Delivery Skills Test Item #13

Session	Objective	Activity	Evaluation
	3. Discover and describe their own behavior style in the group process	Observation Guide	3. Testimonial during process discussion (show of hands and self report)

Session	Objective	Activity	Evaluation
C	Given a stimulus situation as an example of group interaction, participants will:		
	1. Accurately identify at least three blocking roles and the appropriate intervention strategies which the group leader may use	Stimulus Tape on Group Dynamics	Delivery Skills Test Items #2, 4, 9, 12, 14, 15
	2. Accurately identify at least one method of handling conflict	Handout on Conflict HO-C-1	Delivery Skills Test Items #16, 17
	3. Write two questions which will facilitate processing the learning for an experiential activity	Processing Questions	Delivery Skills Test Items #5, 18
	4. Describe the workshop design used throughout the sessions presented	Lecturette	Delivery Skills Test Items #1, 19

Session	Objective	Activity	Evaluation
D	1. Using the Training Style Inventory, participants will assess their personal training and learning styles. They will clarify their beliefs relevant to training and learning	Training Style Inventory	Show of hands during processing

2. Participants will identify the personal preferences of their co-facilitators and clarify how their strengths and weaknesses can be considered when building a team	Team Meeting	During processing by self report
3. Participants will express 2 advantages and 2 disadvantages of working with co-facilitator vs. serving as a single trainer	Lecturette on Cofacilitating	Delivery Skills Test Items 20, 21

National Project on Career Education

DELIVERY SKILLS TEST

1. When designing a workshop, the first thing to consider is the
   - a) time allotment.
   - b) makeup of the group.
   - c) place it will be held.
   - d) goals of the workshop.
2. In a group situation, leadership is usually
   - a) shared.
   - b) represented by the person recording.
   - c) taken by the person who talks the most.
   - d) not evident.
3. Inclusion methods include each of the following, except
   - a) coffee and doughnuts.
   - b) name tags.
   - c) handouts.
   - d) icebreakers.
4. A task oriented group member would most likely
   - a) make sure everyone in the group has a chance to speak.
   - b) keep track of time allotment.
   - c) break up a tense moment with humor.
   - d) make sure everyone understands the question.
5. A good processing question might be:
   - a) Did you find the exercise helpful?
   - b) How much time did the exercise take you?
   - c) Would you use this exercise with another group?
   - d) What happened in your group during the exercise?

6. All of the following are assumptions for experiential learning, except:
    - a) You have the option of not participating.
    - b) You are free to take care of physical needs at any point.
    - c) You are to stay within your usual role as a group member.
    - d) You may question what is happening at any point.

7. For meaningful group discussion, the best group size is
    - a) 2-3.
    - b) 4-6.
    - c) 7-10.
    - d) 11-15.

8. The best way for a group to make a decision is by
    - a) taking a vote.
    - b) having the leader decide.
    - c) reaching consensus.
    - d) referring the decision to committee.

9. The least appropriate way to handle a non-talker in a group is to
    - a) privately confront the person regarding non-talking.
    - b) ask the person for an opinion.
    - c) ask the person to be the recorder.
    - d) ignore the person, assuming non-talking is the person's right.

10. When giving directions, the most important thing to state is
    - a) the group size.
    - b) what you want the group to do.
    - c) where you want the group to do it.
    - d) the conclusion you expect.

11. A group may reach consensus more easily if it
    - a) defines conditions under which members may contribute.
    - b) encourages high verbal participation of its members.
    - c) establishes self-authorized decisions from individual members.
    - d) none of the above.

12. Which of the following is not a characteristic of an effective group?
    - a) Task functions are defined.
    - b) Maintenance functions are established.
    - c) Feelings are discussed.
    - d) None of the above choices is appropriate.

13. A good working group requires each of the following, except
    - a) interaction and communication.
    - b) purpose and goals.
    - c) a designated leader.
    - d) a positive view of the role of conflict.

14. Raising feelings of satisfaction in a group is an example of a
    - a) task role.
    - b) maintenance role.
    - c) blocking role.
    - d) Parker House role.

15. Blocking roles will probably be reduced if
    - a) ground rules are revised after the meeting.
    - b) the group establishes its own purpose.
    - c) group members allow everyone to be heard.
    - d) all of the above.

16. Conflict situations will most likely remain in a group when the group leader uses the
    a) withdrawal method.
    b) negotiation method.
    c) integration method.
    d) collaboration method.

17. The suppression method of dealing with organizational conflict may result in
    a) disappearance of the conflict.
    b) preserving relationships.
    c) the development of a pursuasive minority.
    d) a watered down solution.

18. A good processing question may
    a) require a one word response.
    b) include several ideas.
    c) require divergent thinking.
    d) include long and complete descriptions.

19. An important consideration for workshop design is
    a) including time to share reactions.
    b) keeping participants busy all the time.
    c) allowing participants not to participate in an activity.
    d) all of the above.

20. An advantage of cofacilitating is that it encourages
    a) competition.
    b) a broader focus.
    c) antienergism.
    d) modeling.

21. A disadvantage of cofacilitating is that it

a) reduces dependency on the facilitators.

b) requires individuals with different orientations.

c) reinforces mutual blind spots.

d) encourages lower effort from each facilitator.

Key for Delivery Skills Test

Item #	Correct Response
1	D
2	A
3	C
4	B
5	D
6	C
7	B
8	C
9	D
10	D
11	A or B
12	D
13	C
14	B
15	D
16	A
17	B
18	C
19	D
20	D
21	C

Appendix D

TEST KEY

NPCE

National Project on Career Education

A Joint Project of the
Model Secondary School for the Deaf and
the National Technical Institute for the Deaf

CONTENT TEST

KEY

Career Education/ Planning Skills

Select the best answer by circling the letter of the word or phrase following each item that best completes the sentence.

1. The major problem for disabled individuals capable and interested in working is	a) employment legislation b) inability to get needed skills c) lack of successful experiences [✓ d)] underemployment
2. It is most important to include which of the following on a school's career education team?	a) librarians and teachers b) counselors and administrators [✓ c)] teachers and administrators d) teachers and counselors
3. A major condition affecting member satisfaction in decision-making groups is	[✓ a)] resolving differences in status b) open-ended goals c) increasing work group memberships d) all of the above
4. Part of realistic goal setting involves which of the following	a) identification of informal power within the community b) identification of formal power within the school c) personal assessment of needs [✓ d)] all of the above
5. Incentives of implementing career education include	a) specific scheduling of time [✓ b)] status gains c) short range student benefits d) a voucher system
6. When compared to normal-hearing individuals, career development of hearing-impaired people	a) is restricted to certain skill areas b) is an identical process [✓ c)] follows the same general patterns d) relies upon special intervention
7. Jobs in the labor force can be labeled according to their work orientation which includes	a) facts and observations about the work b) individuals and groups of people involved in the work c) situations and effects related to the work [✓ d)] all of the above

8. The main difference between career education and vocational education is

a) vocational education includes occupational and career education
[✓ b)] vocational education is included within career education
c) there is very little difference between them
d) none of the above

9. A problem-solving orientation to conflict reflects the view that conflicts are

a) easily solved
[✓ b)] natural events
c) can be avoided
d) openly expressed

10. A good career education advisory committee should include representatives from

[✓ a)] school professionals, families and employers
b) employers, families, and teachers
c) parents, teachers, and students
d) teachers, administrators, and parents

11. "Infusion" of career education is better than "add-on" because it

[✓ a)] allows for developmental learning
b) requires greater inservice training
c) lets students see the uniqueness of career education
d) involves a limited number of staff

12. Developmental stages of career education include all of the following, except

a) exploration
[✓ b)] self-direction
c) preparation
d) awareness

13. Career education evolved to address several needs that were not already being met in the schools. These included all of the following, except

[✓ a)] college preparation
b) student motivation
c) school-community cooperation
d) curriculum relevance

14. The main difference between career development and career education is that

[✓ a)] career education is a subset of career development
b) career education is a subset of career education
c) there really is no difference between them
d) none of the above

15. Resistance to change can be minimized through

a) stressing career education as a remedy
b) missionary zeal
[✓ c)] providing psychological support
d) a system of performance rewards

16. Tasks appropriate for the developmental stage of exploration include

a) the identification of different jobs
b) learning trade skills
c) learning what a career is
[✓ d)] comparing work conditions for certain jobs

17. Generally, the perceptions of educators of the deaf toward career education goals have been

a) uninformed
b) antagonistic
c) skeptical
[✓ d)] supportive

18. Given the career education element of career awareness, a teacher planned an activity for students to study the sequence of jobs involved in building a house and to note the occupational titles of workers on these jobs. This activity is an example of

a) a construction activity
b) an add-on activity
[✓ c) an infused activity]
d) a community activity

19. Generally, people work for all of the following reasons, except to

a) satisfy personal interests
[✓ b) develop an avocation]
c) implement personal beliefs
d) attain social status

20. The performance of change is insured and becomes internalized when

a) monies are budgeted for the new activities
b) mandated by the voting public
[✓ c) generated from within a school]
d) change agents design new programs